DOCUMENT RESUME

ED 053 048 SO 001 700

AUTHOR	Wiggins, Suzanne; Sperling, John
TITLE	ECON 12: Student Materials. Unit I. Test Edition.
INSTITUTION	San Jose State Coll., Calif.
PUB DATE	68
NOTE	334p.
EDRS PRICE	EDRS Price MF-$0.65 HC-$13.16
DESCRIPTORS	*Concept Teaching, Criterion Referenced Tests, *Economic Education, Experimental Curriculum, Grade 12, Inquiry Training, Instructional Materials, Learning Activities, *Problem Solving, *Programed Materials, Resource Units, Secondary Grades, Social Studies Units, Textbooks, Workbooks
IDENTIFIERS	*ECON 12

ABSTRACT

This revision and expansion of the 1966 edition of the student materials, ED 040 101, is comprised of student workbook and text for Unit I. As an introduction to economics, it is designed to provide a frame of reference for the study of contemporary economic problems. It is a careful study of such concepts as scarcity, wants, resources, and decision-making with respect to the various economic activities found in all economies, and how these activities are organized into economic systems. Economic concepts and their relationships to the other social sciences are stressed incorporating the basic strategy of problem-solving through inquiry. The seven chapter text includes general discussions by the principal author; twenty-eight readings, including some historical resources, others from foreign countries, and several by the author, are keyed to most of the chapters. The programmed student workbook contains seven programs, criterion tests, and twelve exercises. An extensive use of graphs is continued in the revision, but the unit test is not repeated. Unit II is described in SO 001 701. Other available related documents are: 1) the test editions of the Teacher's Materials for both Unit I and Unit II, ED 040 100; and, 2) the final report of the curriculum development project, ED 028 093. Addison Wesley Company will be publishing the future editions of the units. (SBE)

1743
c1

ED053048

DRAFT COPY: FOR RESTRICTED USE ONLY

SOCIAL SCIENCE EDUCATION CONSORTIUM
MATERIALS DEPOSITORY
[redacted]

ECON 12

STUDENT WORKBOOK

UNIT 1

FALL, 1967

TEST EDITION

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

SO 001 700

CENTER FOR ECONOMIC EDUCATION
SAN JOSE STATE COLLEGE
SAN JOSE, CALIFORNIA

TABLE OF CONTENTS

UNIT I — PAGE

Lesson 1
- Exercise 1: Scarcity 1
- Exercise 2: Choices and Calculating Alternative Costs 3
- Lesson Criterion Test 4

Lesson 2
- Program: Production Efficiency, Productivity 9
- Program: The Law of Diminishing Returns 19
- What's In A Word? 30
- Lesson Criterion Test 61

Lesson 3
- Exercise 1: Exchange and Barter 65
- Exercise 2: What Is Money? (It's Functions and Qualities) 67
- Exercise 3: The U.S. Money Supply 71
- Exercise 4: Types of Credit and Financial Institutions 73
- Exercise 5: Interest Rates for Regular Buying and Installment Buying 76
- Program: Purchasing Power in Income, Wealth, and Credit 82
- Program: Capital and Investment 97
- Program: Saving 108
- Lesson Criterion Test

Lesson 4
- Exercise 1: The Relation Between Current Saving and Real Investment 123
- Exercise 2: Economic Institutions 124
- Lesson Criterion Test 127

Lesson 5
- Exercise 1: The Circular Flow Diagram as a Model of an Economy 133
- Exercise 2: Product and Factor Markets 135
- Exercise 3: Measuring Economic Activity, the Differences Between "Stocks" and "Flows" 136
- Program: Systems 138
- Lesson Criterion Test, Part I 154
- Lesson Criterion Test, Part II 159

Lesson 6
- None

Lesson 7
- Program: Definition of Economics 164

LESSON 1

UNIT I
EXERCISE 1

SCARCITY

In economics, scarcity means inadequate supply. A thing is scarce if the needs or desires to use it are greater than the amount of it immediately available (if wants > resources). The condition of scarcity is a constant part of the human condition; it creates the need for people to organize into community life to better satisfy their wants.

Since the purpose of all economic activity is to reduce scarcity, understanding how economists define scarcity will give you a better insight into what economic choice and activities involve.

A. For the following questions, decide whether or not the thing described is scarce. Explain your answer in the space provided by making sure that you can show that, in the particular case, wants > available resources.

   1. You are a pilot stranded alone on an island in the South Pacific. You are hungry and there are fish in the sea. You can see them. Are the fish scarce?

   2. Suppose that right now, there are 1,000,000 new automobiles waiting to be sold in the U.S. They are being stored by dealers, or, they are en route from the assembly plants to the auto dealers. Are new automobiles scarce in the U.S.?

   3. A scientist discovers a new, rare element which, at present, has no use in any production process. Is the element scarce?

   4. Is ocean water scarce for a citizen in an inland city like Denver, Colorado?

5. Is your time scarce this week?

B. Below are statements about scarcity. Check the true statements.

_____(a) all rare things.

_____(b) all things which are produced with the use of scarce resources.

_____(c) all things which are scarce today have always been scarce.

_____(d) Anything which has an alternative cost.

_____(e) all things sold for a price.

C. What circumstances must you take into consideration to determine whether or not a thing is scarce?

4

UNIT I
EXERCISE 2 LESSON 1

CHOICES AND CALCULATING ALTERNATIVE COSTS

John graduated from high school; he has taken a full-time job for $320 per month, and he is looking for an apartment to rent. He has found two apartments that he likes: One is a furnished studio apartment (one room, kitchenette and bath), renting for $75 per month; the other is a furnished one-bedroom apartment with a swimming pool and a nice view from the living-room window, but it rents for $125 per month.

He hasn't bought a car yet, and doesn't really need one to get to work. Of course, a car would simplify transportation and dating and he wants a used Mustang at $50/month. He wants a Hi Fi set which will cost $15/month, and could run up bills for clothes to a limit of $35/month. There is also a possibility of a two-week vacation in Alcapolca (his boss will give him the time off), but it will cost him $35/month for the next 12 months.

1. What are two of the many ways to calculate the alternative cost of renting the more expensive apartment ?

   a. ______________________________

   b. ______________________________

2. Give two alternative costs of buying the Mustang?

   a. ______________________________

   b. ______________________________

3. If John tried to make the most reasonable choice he could, on what basis should he decide whether or not to rent the more expensive apartment?

____

____

____

____

____

____

UNIT I
LESSON NO. I

LESSON
CRITERION TEST

1. (In this question, you will notice that each blank that you are to fill in is numbered. The numbers correspond to the correct answers that are listed at the end of the test. Do not check your answers until you have completed this section.)

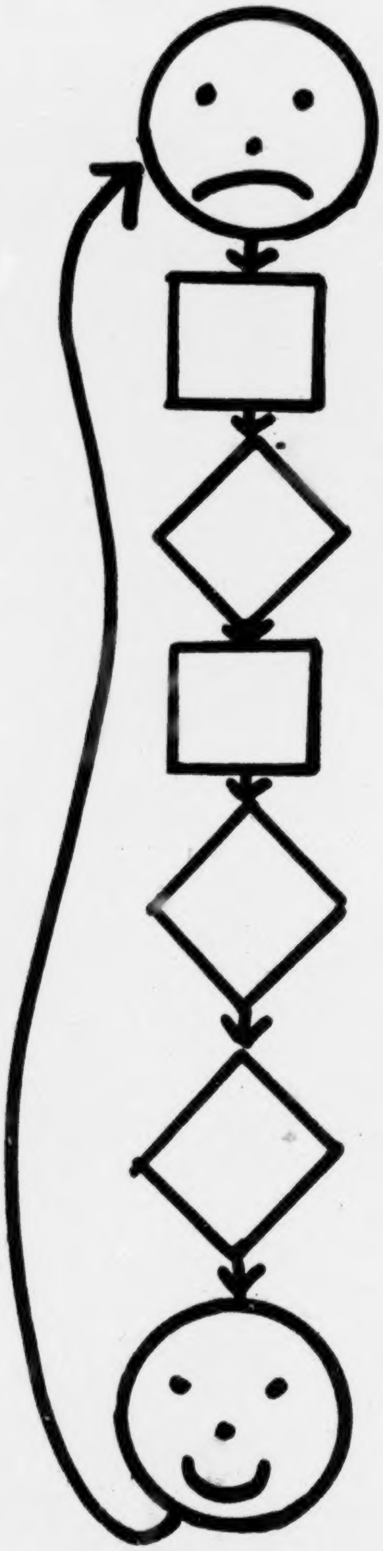
Men's wants are a mixture of (1.________________ wants and (2. ________________ wants. A person is rarely completely (3. ________________ , and if he is, he doesn't stay that way long. A (4.________________ want is a basic need for food, clothing, and shelter, while a (5.________________ want is a desire for greater comfort of the mind and body. Wants are satisfied through the production of (6.________________ and the entire process of satisfying wants has been illustrated by the (7.________________ .

If what people want is greater than the (8.________________ available to fill the want, then there is (9.________________ . This condition of (10.________________ means that people cannot have everything they (11.________________, and they must be selective about what they (12.________________ most. The things we give up in order to use a resource to satisfy a particular want is called the (13.________________ ________________ of that satisfaction. This is the real cost of something.

One function society serves is to set up ways in which people can (14.________________ disputes over the use of scarce resources.

2. Place the following list of words along side of proper box or circle in the want-satisfaction chain shown below. Identify which of these boxes or circles represents an economic activity.

distribution
satisfaction
wants
physical
outputs
psychological
inputs
consumption
production



7

3. The list below includes items which are either inputs or outputs, or are both inputs and outputs. If the item is an input, place a check in the column labeled inputs; if it is an output, place a check in the column labeled output; if it is both, check both columns.

Input	Output	
		printing press
		sports car
		vacation flight to Los Angeles
		services of a barber
		wild mink
		wheat
		commercial airliner
		operation by a doctor
		office building
		surfboard
		farm tractor
		oil deposit

4. If = means equal to

$>$ means greater than

$<$ means less than

Place the proper sign between the pairs of items listed below:

a. $4 \qquad 3$

b. $3 \qquad 4$

c. $3+4 \qquad 4+3$

d. $7+8+6 \qquad 6+8+6$

e. $A+B \qquad B+A+C$ (if $C = 10$)

f. $A+B \qquad B+A+C$ (if $C = -10$)

g. $A+B \qquad B+A+C$ (if $C = 0$)

h. $(\ )^2 \qquad (\frac{1}{2})^2$

5. You are alone on a desert island with a pocket full of diamonds. Are the diamonds scarce? Explain by describing the scarcity conditions you are assuming in giving your answer.

6. Check the following true statements about scarcity.

_____ Whether or not a thing is scarce depends on the persons whose wants are being considered.

_____ If a thing is scarce for some people, it is scarce for everyone.

_____ If a thing is scarce for a person at one time, it is scarce for him at all future times.

_____ Determining whether or not a thing is scarce requires a comparison.

7. From the list below, underline all the synonyms for scarce. From the point of view expressed in this lesson, circle the best synonym and write an explanation of why it is the best synonym.

rare

abundant

small amount

unusual

insufficient

small

few

Your explanation: ____

____

____

____

8. Sally Love has a chance to go to a concert Sunday afternoon from 1-5 p.m., or babysit for 75¢ per hour. She has $15.00 to spend. What is the alternative cost of going to the concert?

9. What kinds of actions to reduce scarcity are considered economic actions? Illustrate.

UNIT I
LESSON NO. I

ANSWERS TO LESSON I CRITERION TEST

1. (1) physical; (2) psychological; (3) satisfied; (4) physical; (5) psychological; (6) outputs; (7) want-satisfaction chain; (8) resources; (9) scarcity; (10) scarcity; (11) want; (12) want; (13) alternative cost; (14) settle

2. Should be in the following order:

   wants, inputs, production, outputs, distribution, consumption, satisfaction. Production, distribution, consumption are economic activities.

3. printing press - input, output
   sports car - output
   vacation flight to Los Angeles - output
   services of a barber - input, output
   wild mink - input
   wheat - input, output
   commerical airliner - input, output
   operation by a doctor - input, output
   office building - input, output
   surfboard - output
   farm tractor - input, output
   oil deposit - input

4. a. >
   b. <
   c. =
   d. >
   e. <
   f. >
   g. =
   h. (½) >

5. This answer depends on the additional conditions you specify. Assuming there is nothing you can do with the diamonds, they are not scarce.

6. True: Whether or not a thing is scarce depends on the persons whose wants are being considered.

   Determining whether or not a thing is scarce requires a comparison.

7. Synonyms: rare, insufficient Best Synonym: insufficient

   rare has another meaning: not many in existence

8. 4 hours of babysitting or $3.00

9. Production - make a fish hook, fishing
   Distribution - transporting cars to dealers, retail store

Unit I
Lesson 2

PROGRAM ON PRODUCTION EFFICIENCY, PRODUCTIVITY

The resources with which we satisfy our wants are scarce. As a result, we try to be efficient in using these resources. The more efficient we are, the less we waste of the scarce resources and, therefore, the more satsifaction we can get from a given amount of the resources. Those who produce goods and services are concerned to make their production as efficient as possible. They need ways of measuring production efficiency (or productivity, as it is also known) so that they can compare various resources and processes and find out which yields the desired output with the least use of inputs.

This program is about the meaning and measurement of productivity (efficiency in production). It will help you learn the following:

1. the definition of production efficiency (productivity),
2. how to measure efficiency,
3. how to compare two production processes to determine which is more efficient,
4. the distinction between single-factor productivity and total productivity

INSTRUCTIONS ON HOW TO COMPLETE THIS PROGRAM

This is a short, programmed-instruction sequence. The program is composed of Frames, and a Criterion Test. Each frame gives information, and then you are asked to answer one or more questions based on the information given. The criterion test tests whether or not you have achieved the program learning objectives.

The frames are clearly separated. There is a space provided in each frame for your answer. Please answer the questions in the order in which they are presented to you. You may become confused if you try to understand the frames out of their logical sequence. The answers to each frame are given at the end of the frame enclosed in a solid line box:

answer

It will help you in answering the questions by yourself, if you cover the correct answers with a piece of paper. Don't uncover the correct answer until you are ready to check your own answers with the correct ones provided in each frame.

FRAME 1

As a first step in deciding which of two plants is more efficient, we must measure the PRODUCTION EFFICIENCY of each plant. This efficiency is measured by a PRODUCTIVITY ratio, which is the ratio of output to input.

For example, suppose the Clayware plant requires 2250 man-hours of labor to produce 9000 plates per day. Then, the productivity for the

$$\text{Clayware Plant} = \frac{\text{Output}}{\text{Input}} = \frac{9000 \text{ plates}}{2250/\text{man-hrs.}}$$

or, reducing the ratio to a convenient unit of input, Clayware Plant produces 4 plates per 1 man-hour--that is, 4 plates/1 man hour.

Suppose that the Stoneware plant uses 1500 man-hours to produce 4500 plates per day. Calculate the productivity (efficiency) of the Stoneware Plant.

$$\text{Productivity of Stoneware Plant} = \frac{\text{output}}{\text{input}}$$

$$= \frac{(\qquad\qquad)\text{ plates}}{(\qquad\qquad)\text{ man-hours}} = \frac{(\qquad\qquad\qquad)}{(\qquad\qquad\qquad)} = (\qquad\qquad\qquad)/1 \text{ man-hour}$$

$$\boxed{\frac{4500 \text{ plates}}{1500 \text{ man-hrs.}} = \frac{3 \text{ plates}}{1 \text{ man-hr.}} = 3 \text{ plates/1 man-hour}}$$

FRAME 2

Clayware Plant produces 4 plates/1 man-hour
Stoneware Plant produces 3 plates/1 man-hour

Which plant is the more efficient?

(check one)

(a) ______________ Clayware Plant

(b) ______________ Stoneware Plant

(a) Clayware. The Clayware Plant is the more efficient producer because it produces more plates per man-hour than does the Stoneware Plant.

FRAME 3

The comparison shows that for one of the factors of production (labor input), the Clayware Plant is more efficient than the Stoneware Plant.

Does the comparison provide us with absolute proof that the Clayware Plant is more efficient in every way than the Stoneware Plant?

(check one)

(a) _______ Yes

(b) _______ No

Give a reason for your answer: ____________________

____

____

(b) No. There are other inputs to consider than the labor input--materials, machine use, space, and so on.

FRAME 4

Use the following information to further calculate productivity.

	Clayware Plant		Stoneware Plant
Input	225 machine-hours	Input	90 machine-hours
Output	9000 plates	Output	4500 plates

Clayware Plant productivity = $\frac{\text{output}}{\text{input}}$ = $\frac{\text{\_\_\_\_\_\_\_\_ (plates)}}{\text{(machine-hrs)}}$ = ________

Stoneware Plant productivity = ________________ = ________________

Which plant is more productive in the use of machine time? ________________

The Stoneware Plant makes more efficient use of machine time.

Clayware Plant productivity = $\frac{\text{9000 plates}}{\text{225 machine-hrs.}} = \frac{\text{40 plates}}{\text{1 machine-hr.}}$

Stoneware Plant productivity = $\frac{\text{4500 plates}}{\text{90 machine-hrs.}} = \frac{\text{50 plates}}{\text{1 machine-hr.}}$

FRAME 5

To determine which of two or more production processes is more efficient in the use of a single factor of production, we calculate productivity,

which is the ratio of ____________ to ____________

output to input

FRAME 6

____________________________ = Output/Input

Productivity

FRAME 7

A point to note:

In the examples you have seen so far, perhaps you noticed that the inputs have always been reduced to units that are convenient for calculation--per one man-hour, per one machine-hour, etc.

Productivity ratios are always stated so that input units are expressed in terms of a single unit of whatever factor is involved. This simplifies comparison.

Which of the following productivity ratios are not stated in their most convenient form?

(a) 12 ounces/$1
(b) 7 boxes per ton
(c) 10 pieces/$1.33 yard
(d) 18 samplings/$12
(e) 12 shirts per man-hour
(f) 60 frames/hour

(c) and (d)

In both, the input units should be simplified to make comparison easier:

(c) 10 pieces/$1.33 yards - 7.5 pieces/1 yard

(d) 18 samplings/$12 = 1.5 samplings/$1.

FRAME 8

In single-factor productivity ratios, we compare total output with how many factors of production?

____

one. (that's why it's called a single-factor productivity)

FRAME 9

When we calculate productivity by comparing total output with a single factor of production, can we be sure that we have a complete picture of a factory's production efficiency?

(a) ______ Yes

(b) ______ No

(b) No

FRAME 10

So far, we have compared pairs of production processes to determine which is more efficient in the use of a single input. We have computed output-input ratios to describe the productivity of one input at a time. This is fine. A company, an industry, or even a nation may need to know how efficient it is in using steel, labor, or some other resource.

But often they will want to know the overall efficiency of a production process. Thus it is convenient to distinguish between what we call "single-factor productivity" and total productivity.

To figure total productivity we have to add together all the resources which make up the inputs. How is it possible to add up the total amount of inputs when they are measured in different units of measurement (e.g., tons, man-hours, machine-hours)?

(Your own words) ____

____

____

You can figure the money cost of each factor, and then add these costs to get the total cost of inputs used.

FRAME 11

Consider the following problem:

Clipco makes metal fasteners. Here are production figures for Clipco:

Output	1000 fasteners
Inputs	
Materials	1 ton steel-costing $150
Labor	5 men for 4 hours; wage $3/ hr.
Machines	4 hours at $10/ hour

What is the ratio of total productivity?

(a) I need a hint to get started...GO TO FRAME 12

(b) I think I've got the answer...COMPARE YOUR ANSWER WITH THE ONE THAT FOLLOWS FRAME 13

FRAME 12

HINT

The problem, once again, is to figure a productivity ratio of output to input. But this time you have to figure total productivity and not just productivity for a single factor such as man-hours.

To add together inputs as different as man-hours; machine-hours, and materials, you must measure these inputs in units that can be added together. In other words, you need the dollar value of each input.

(a) OK, I think I get it now...NOW COMPLETE FRAME 11

(b) More hint, please...GO TO FRAME 13

FRAME 13

MORE HINT

To calculate total productivity, you must first get the dollar value of all inputs. Next, you add them together to get the total cost of all inputs. And then you calculate a productivity ratio, just like the examples we've had before, except that this time you have to figure output per $1.

Here's a start:

Inputs

Materials,	1 ton steel costing	$150
Labor,	5 men x 4 hours = 20 man-hours at $3 per hour	60
Machines,	4 hours at $10/hour	__?
	Total cost of inputs	______?

NOW RETURN TO FRAME 11 and calculate the output/input ratio for total productivity.

ANSWER FOR FRAME 11

Calculation

INPUTS	AMOUNT	COST
Material	1 ton	$ 150
Labor	5 men x 4 hours = 20 man-hours	60
Machines	4 hours	40
		$ 250

TOTAL PRODUCTIVITY = output/total cost of inputs
= 1000 fasteners/$250
= 4 fasteners/$1

FRAME 14

We calculated for Clipco: Total productivity: 4 fasteners/$1.

Here are production figures for its rival, Gripco:

Output	2000 fasteners
Inputs	
Material	2 tons steel at $150/ton
Labor	2 men for 4 hours; wage $4/hour
Machines	4 hours at $42/hour

(a) For Gripco, what is the total productivity:

____

(Space provided for figuring on the next page)

Figuring Space - FRAME 14

(b) Which company is more efficient?

____

Calculation

INPUTS	AMOUNT	COST
Material	2 tons	$ 300
Labor	8 man-hours @ $4/hour	32
Machines	4 hours @ $42/ hour	168
	TOTAL COST OF INPUTS	$ 500

(a) TOTAL PRODUCTIVITY = output/total cost
= 2000 fasteners/$500
= 4 fasteners/$1.

(b) They are equally efficient.

UNIT I
LESSON NO. 2

PROGRAM
CRITERION TEST

1. To find out which of two production processes is the more efficient, we have to calculate the ________________ of each.

2. A productivity ratio is the ratio of __________________ to __________________.

3. "40 fasteners/man-hour" is an example of (labor/total/machine) (choose one) __________________ productivity ratio.

4. If we are concerned only with single-factor productivity, we express input in terms of __________________ (how many?) factors of production.

5. What unit of measurement is used for input in calculating total productivity for a production process? __________________

6. Calculate (a) labor productivity and (b) total productivity for Gripco:

Output	2000 fasteners
Inputs	
Materials	2 tons steel costing $300/ton
Labor	10 men for 8 hours, wage $3/hour
Machines	8 hours at $20/hour

(a) Labor productivity = __________________

(b) Total Productivity = __________________

7. If it costs Grabco, Inc. 33 cents to make a fastener similar to those made by Gripco, which company is the more efficient?

UNIT I
LESSON NO. 2

ANSWERS TO CRITERION TEST

1. Productivity (efficiency)
2. output to input
3. Labor
4. one
5. dollars
6. (a) 25 fasteners/1 man-hour
   (b) 2 fasteners/$1
7. Grabco. (Grabco's productivity is about 3 fasteners/$1, as compared to Gripco's 2 fasteners/$1)

UNIT I

LESSON 2

PROGRAM ON THE LAW OF DIMINISHING RETURNS

After completing this program about The Law of Diminishing Returns, you will be able to:

1. recognize a correct statement of the law;
2. state what causes production to show diminishing returns;
3. recognize cases of increasing, diminishing and constant returns, given data on inputs and output of a particular process.

INSTRUCTIONS ON HOW TO COMPLETE THIS PROGRAM

This is a short, programmed-instruction sequence. The program is composed of Frames, and a Criterion Test. Each frame gives information, and then you are asked to answer one or more questions based on the information given. The criterion test tests whether or not you have achieved the program learning objectives.

The frames are clearly separated. There is a space provided in each frame for your answer. Please answer the questions in the order in which they are presented to you. You may become confused if you try to understand the frames out of their logical sequence. The answers to each frame are given at the end of the frame enclosed in a solid line box:

answer

It will help you in answering the questions by yourself, if you cover the correct answers with a piece of paper. Don't uncover the correct answer until you are ready to check your own answers with the correct ones provided in each frame.

FRAME 1

When you drop a dime into a coke machine, the dime is an input, and the drink is an output received in return for the input.

What happens in the machine is a production process. In any production process, we use inputs, and we expect an output in ____________________.

return

FRAME 2

If you put another dime in the vending machine and make the same selection as before, you expect that the return will be:

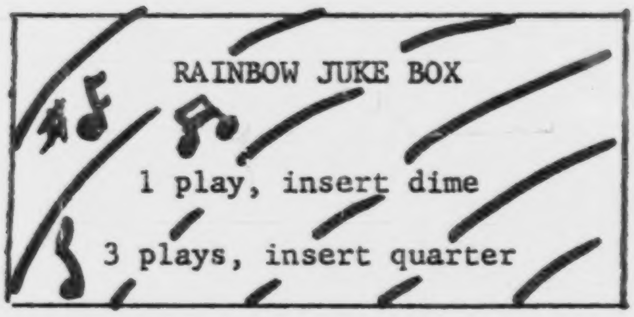
(check one)

_____(a) the same as before

_____(b) different than before

(a) the same as before

FRAME 3



Depending on whether you insert a dime or a quarter, the return on your money is

(check one)

_____ (a) the same

_____ (b) different

different

FRAME 4

As compared with one play for a dime, three plays for a quarter gives you

(check one)

_____ (a) an increase in the average return on your input
_____ (b) a diminished average return on your input

(a) an increase in the average return

For a single dime you get 1 song. When you insert one quarter, you get 3 songs, which is 3/2.5=1.2 songs/dime.

FRAME 5

In the shipping department of a factory, two men manufacture 20 packing crates per day. There is room in the department for no more than four men to work in comfort, and there are sufficient tools for only four men.

If we increase the number of men from two to four, how many crates would you expect them to produce each day? ______________

40

FRAME 6

Suppose we add two more men, bringing the total to six, but we change nothing else. There is still room for no more than four men to work in comfort, and there are tools for only four men.

Would production increase to 60 crates per day?

____

probably not

FRAME 7

The extra crates packed by the two extra men would probably be less than 20.

That is, the return would probably diminish (get smaller) if the number of men employed is brought up to six. Why is this true?

(In your own words) ______________________________

____

____

With room for only four to work, six is a crowd. With tools provided for only four, some cannot stay busy.

FRAME 8

One way of looking at this change in productivity is to calculate how much extra output is obtained for each addition to input.

INPUT man-days	OUTPUT crates	ADDITION TO OUTPUT crates
2	20	--
3	30	10
4	40	10
5	48	(a)_____
6	54	(b)_____

(complete (a) and (b) above)

(a) 48 - 40 = 8

(b) 54 - 48 = 6

FRAME 9

Instead of saying something like, "the extra output gained from the addition to input," we use the expression marginal return. "Margin" is used in the sense of "extra," just as the margin of a page is the extra space to the side of the printed matter.

The extra return obtained from an addition to the amount of input is the __________ return.

24

marginal

FRAME 10

Three persons working in a delicatessen can produce 240 sandwiches an hour. By adding a fourth person, output can be increased to 300 sandwiches per hour.

The extra 60 sandwiches per hour obtained by adding another person to the staff are the ________________ ______________.

marginal return

FRAME 11

INPUT (number of men)	OUTPUT (pairs of sandals/day)
1	2
2	5
3	9
4	12

In the above example, what is the marginal return from hiring.

(a) the third worker? __________

(b) the fourth worker? _________

(a) 4 pairs of sandals per day

(b) 3 pairs of sandals per day

FRAME 12

On a production line, 500 men assemble 100 engines a day. If the number of men used is doubled, which of the following outputs would indicate a diminishing marginal return?

(check one)

_____ (a) 210

_____ (b) 200

_____ (c) 190

(c) 190.

To get the same return from the second 500 workers as from the first 500, the marginal return from the extra 500 must equal the output of the first 500 workers.

FRAME 13

Daily Input (man-days)	Daily Output (crates)
1	9
2	20
3	30
4	40

In the example above, daily input is increased from 3 man-days to 4 man-days,

(a) daily output is increased/constant/diminished
(circle one)

(b) the marginal return in increased/constant/diminished
(circle one)

(a) daily output is increased (from 30 to 40 crates per day)

(b) marginal return is constant (the third man added 10 crates/man-day to output; the fourth man adds 10 crates/man-day.)

FRAME 14

Daily Input (man-days)	Daily Output (crates)
1	9
2	20
3	30
4	40
5	47

If we increase daily input from 4 man-days to 5 man-days,

(a) daily output is increased/decreased
(circle one)

(b) marginal return is increased/constant/decreased
(circle one)

FRAME 15

When marginal return begins to fall, we say that the return is diminishing.

Suppose that 200 persons is the maximum number that can work efficiently in a particular factory building. If we put 400 persons to work in that building, would you expect the marginal return to diminish?

(check one)

(a)_____ Yes

(b)_____ No

Yes

FRAME 16

Why would the marginal return diminish if 400 people had to work in a building designed for 200?

(Your own words) ______________________________________

____

____

____

Not enough room. If we double the number of persons in the building, nobody has enough space to work efficiently. Marginal return for the second 200 persons will fall below that of the first 200.

FRAME 17

In the last example, one of the inputs (the amount of space available) was fixed. As the labor input was increased, each person had a smaller share of the fixed input (each person had less space, in other words). As a result, the marginal returns were expected to decrease.

If we carried this thing to a ridiculous extreme and packed the building with so many people that nobody could more, what would the total return be? _________________________

zero

FRAME 18

We have just seen that if the size of the building is fixed, we cannot increase other inputs in a production process without eventually diminishing the marginal returns.

Suppose that space is no problem in the factory and that there is ample room for as many people as we care to add. If we double the number of people, but do not increase the amount of necessary machinery, will we again run into diminishing marginal returns?

(check one)

_____ (a) Yes

_____ (b) No

(a) Yes

FRAME 19

See if you can describe why marginal returns would diminish in this case: ____________

____

____

____

(Your own words) Once again, one of the inputs is fixed. This time, it is the amount of machinery. If we double the number of workers without changing the amount of machinery, each worker is going to spend part of his time waiting to use a machine.

FRAME 20

The Law of Diminishing Returns

When one or more factors of production are fixed, increasing output by increasing other factors leads eventually to diminishing marginal returns.

(Frame 20 - continued)

Note that this is a law. In science, a law describes a relationship which has always held true. Anytime you try to step up production, if one or more factors of production are fixed, you're going to run into diminishing marginal returns.

Is the following statement true or false?

If at least one input is fixed, it limits the total amount of output that can be produced.

(check one)

_____ (a) True

_____ (b) False

(a) True

FRAME 21

	Inputs	Output
Machines:	10 ovens	
Labor:	200 man-hours	80,000 loaves
	400 man-hours	155,000 loaves

(a) The above is an example of

____

(b) The fixed factor of production is machines/labor.
(circle one)

(a) diminishing returns

(b) machines

FRAME 22

In that last example, if you doubled not only the number of man-hours but all other inputs--machinery, materials, space, etc.--so that you had twice as much of each factor of production, would you expect return to diminish?

(check one)

_____ (a) Yes _____ (b) No

(b) No.

Returns eventually diminish when one-or-more factors of production are fixed.

END

UNIT I
LESSON NO. 2

PROGRAM
CRITERION TEST

1. You are given the following information about the production of automobiles. (below) In the spaces on the left, write the number of man-days of input where the addition of the last man day shows that:

____________(a) diminishing returns begins

____________(b) there are constant returns

____________(c) there are increasing returns

Number of machines	Number of man-days	Amount of output produced
10	2	40
10	3	60
10	4	85
10	5	110
10	6	130
10	7	145

2. In the above production schedule, what causes diminishing returns?

____

____

____

3. Circle the letter which precedes the best definition of diminishing returns listed below.

(a) increased inputs lead to decreased outputs

(b) increasing all fixed inputs leads to decreasing outputs

(c) One or more inputs are fixed, the addition of extra units of variable inputs will eventually lead to smaller and smaller amounts of extra output.

(d) all inputs but one are fixed, the use of more of the variable input will lead to a small total output.

4. Diminishing returns can be eliminated by:

(circle one of the letters)

(a) increasing all inputs proportionately

(b) decreasing all inputs proportionately

(c) holding one input constant

(d) trying harder

UNIT I
LESSON NO. 2 **ANSWERS TO CRITERION TEST**

1. 6, 5, 4
2. the fact that these are a fixed number of machines
3. (c)
4. (a)

UNIT I
Lesson 2

Program
WHAT'S IN A WORD

Introduction

The purpose of this program is to point out the importance of precise definitions. When you have finished working through the program you will be able to. . .

1. Distinguish between true and false statements about the nature of definitions;
2. Explain in your own words why it is so important to define terms carefully, particularly in the study of economics;
3. From a list of definitions, choose the one that is most precise;
4. Analyse disagreements that result from a misunderstanding about the meaning of words.

FRAME I

Here's a question to get you started.

Is the U.S. a gynecocracy?

_____(a) Yes

_____(b) No

_____(c) That's not a fair question

Opinions may differ, but we feel that the question is unfair because we sprung it on you without first explaining what we mean by "gynecocracy." Even if you knew that it means "rule by women," it was possible to answer Yes (many husbands feel henpecked) or No (our political leaders are mainly men).

The point is this: If you want to communicate efficiently, you must define your terms.

FRAME 2

By learning to define terms carefully, you can improve your ability to settle arguments, make valid judgments, and come to sound decisions.

Now, choose the sentence that best reflects your attitude at this point--don't worry about a wrong or right answer.

_____(a) But I like to argue.

_____(b) Show me how to improve my ability to settle arguments.

(a) or (b) -- Your choice.

If you're one of those people who like to argue, that's good. But if you like to argue, you probably do it for the sake of more than just making a noise. Most likely, you like to try to convince others of your point of view, to show that you have the answer to a problem. But, look at it this way: If you are careful to get your opponent to define his terms, and if you do the same, you may avoid a big and unnecessary misunderstanding. Sometimes we fail to understand another person because his remarks could mean many different things and we do not notice it or we are not sure which meaning he intends.

FRAME 3

An example

(Two children are arguing)

Betty: He is too! My father is bigger than yours.

Johnny: That's what you think! My father's bigger than yours any day!

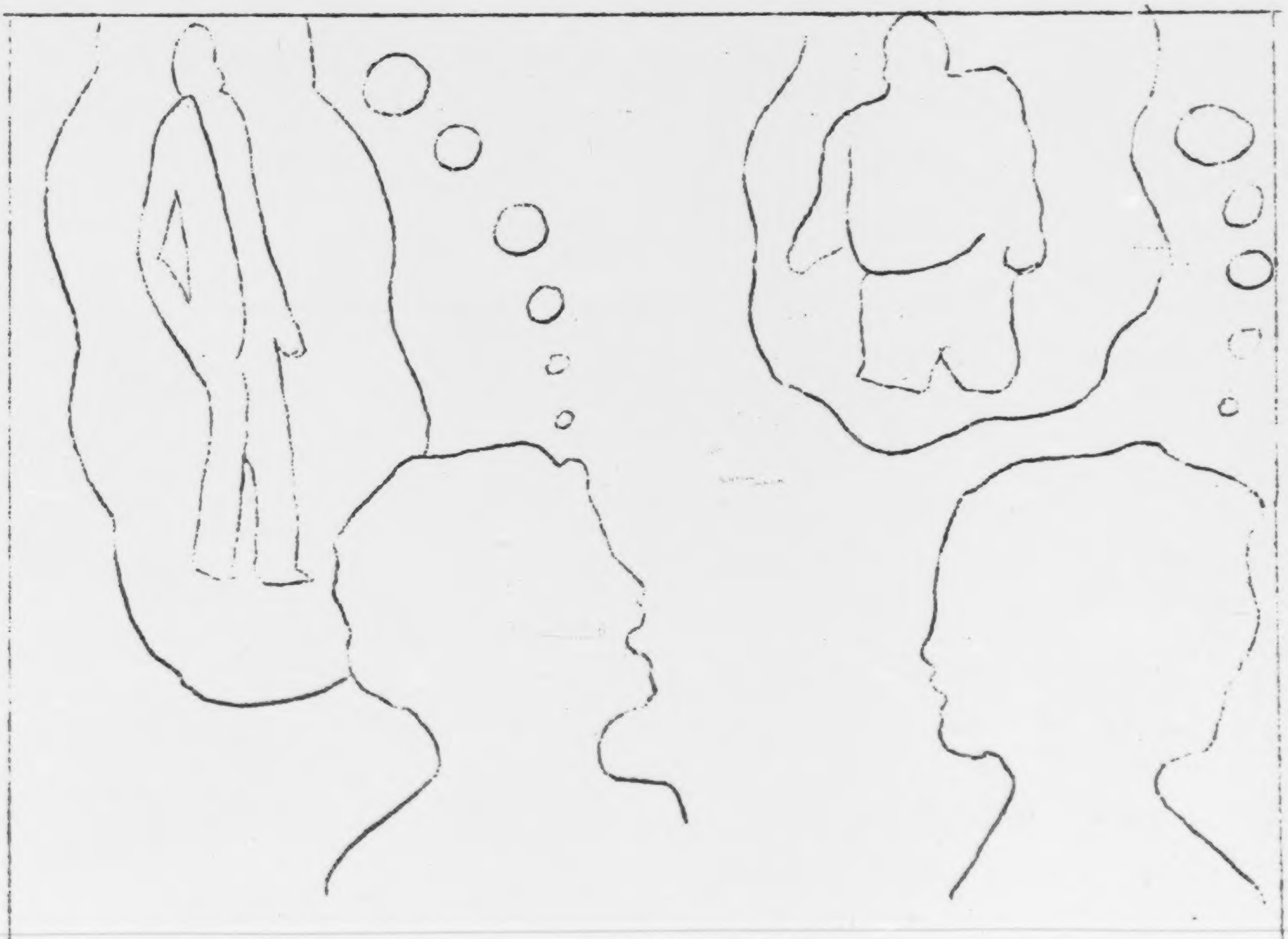
Here are some facts Betty's father is six feet tall.
Johnny's father is six feet four.

Who is right?

_____(a) Johnny.

_____(b) Betty.

(FRAME 3 - continued)



As our illustration shows, either answer is correct depending on what you mean by "bigger."

FRAME 4

Johnny was using the word "bigger in the sense of "larger up and down, taller." But "bigger" might also be used in the sense of "bigger around." If we are going to agree on whose father is bigger, we must decide on what we mean by "bigger."

James MacKaye, who wrote The Logic of Language, developed a system of analysis that is useful in clearing up arguments. In this system there are four steps. The first step is to state the basic question around which the dispute revolves. What was the basic question in the argument between Johnny and Betty?

(FRAME 4 - continued)

The basic question was: "Whose father is bigger?"

FRAME 5

The second step is to identify the ambiguous word or phrase in the question. An ambiguous word is one whose meaning is not clear.

What was the ambiguous word in the dispute between Johnny and Betty?

____

Ambiguous word: bigger.

FRAME 6

(a) Step I: State the basic ____________ around which the argument revolves

(b) Step II: Identify the ____________ word or phrase in the question.

(a) State the basic QUESTION.

(b) Identify the AMBIGUOUS word or phrase.

FRAME 7

The third step is to determine how each person involved defined the ambiguous word or phrase. Usually this is the hardest part of the analysis.

See if you can define the word "bigger" first as Betty would, then as Johnny would. (Johnny had the tall, skinny father.)

Betty's definition of "bigger": ____________________________

Johnny's definition of "bigger": ____________________________

(FRAME 7 - continued)

Betty's definition: larger around, fatter, wider, etc.
Johnny's definition: larger up and down, taller.

FRAME 8

In Step III, it helps to number the different definitions. For example:

bigger$_1$: larger around, fatter

bigger$_2$: larger up and down, taller

Numbering the ambiguous word makes it clear that there are two correct answers to the basic question, "Whose father is bigger?" The answer depends upon whether we use definition #1 (bigger$_1$) or definition #2 (bigger$_2$).

Now complete Step IV by writing in the answer for each question:

Whose father is bigger$_1$? Answer:________________________

Whose father is bigger$_2$? Answer:________________________

Whose father is bigger$_1$? Answer: Betty's.
Whose father is bigger$_2$? Answer: Johnny's.

FRAME 9

Notice that we have asked the question twice in Step IV, first with one meaning of the word "bigger" in mind, then with the other. We numbered the ambiguous word to show which meaning we were using in each question.

Here are all of the steps in our analysis. See if you can fill in the missing words:

1. State the basic____________that the __________revolves around.
2. Identify the__________________words or phrases.

(FRAME 9 - continued)

3. Determine how each person ____________________ the ambiguous words or phrases.
4. Ask the basic question again for each of the various definitions for the ambiguous words or phrases.

> 1. State the basic question that the argument (dispute) revolves around.
> 2. Identify the ambiguous words or phrases.
> 3. Determine how each person involved defined the ambiguous words or phrases.
> 4. Ask the basic question again for each of the various definitions for the ambiguous words or phrases.

FRAME 10

From our four-step analysis of the disagreement between Betty and Johnny, would you say that they were disagreeing about the facts?

_____(a) Yes

_____(b) No

> (b) No. Actually, the disagreement between Betty and Johnny resulted from a misunderstanding of what was meant by "bigger." This is not usually referred to as a disagreement about fact.
>
> Betty would probably agree about the FACT that Johnny's father is taller than hers. Johnny would probably agree about the FACT that Betty's father is heavier than his.

FRAME 11

Usually, after we have clearly defined our terms, we find that we have been in agreement with our opponents all along about the facts.

What if you and your opponent still disagree about the facts after applying MacKaye's method. What good has the analysis done for you?
(Read the hint at right if you cannot answer the question.)

____

____

____

____

____

Hint

In the case of Betty and Johnny, the facts had to do with the actual dimensions of their fathers. If, after defining the ambiguous word "bigger," they could not agree on the facts, it would have been possible to obtain measurements of each father's height and girth.

In other words, using MacKaye's method, the argument stops being one of those "He is--he isn't" spats and moves to facts that can be verified. You stop going around in circles and start looking at the main question.

Now try to answer the question.

Your answer should say something like this: The analysis using MacKaye's method avoids needless misunderstanding. You and your opponent each has a clear idea of what the other is saying. Now you are disagreeing about facts, not the meaning of words. Both you and your opponent can go get the facts now and carry on a more intelligent conversation.

FRAME 12

Let's apply MacKaye's method of analysis to a discussion related to economics.

Two people are arguing about whether water is scarce on a farm that has a conveniently located well producing 2,000 gallons of water per day. One individual is convinced that water obviously cannot be considered scarce while the other states confidently that it can.

Step I is to state the question that the dispute revolves around:

"Is water scarce on a farm that has a conveniently located well producing 2,000 gallons of water per day?"

Step II is to identify the ambiguous word.

What is the ambiguous word in this case?____________________

(FRAME 12 - continued)

SCARCE is the ambiguous word.

FRAME 13

In determining how each person would define the term "scarce" we might come up with the following analysis:

I. Basic question: Can water can be scarce on a farm that has a conveniently located well producing 2,000 gallons of water a day?

II. Ambiguous word: "scarce"

III. Different meanings: scarce$_1$: hard to find, rare.
scarce$_2$: not enough.

Step IV is to ask the basic question with specific meanings in mind for the ambiguous word. It should be clear that according to definition number one water is not scarce in this situation: it is not hard to find. If you want water, you can go the the well; the water is not rare.

Suppose that the farmer needs 2,550 gallons a day to water his crops and to provide water for his cattle to drink. According to definition number one, water is still not scarce because it is not "rare or "hard to find."

In this situation, is water "scarce" according to definition number two? Why or why not?

You should say something like this: Yes, water is scarce in this situation because the farmer does not have enough water.

FRAME 14

Here is our analysis of this problem so far:

I. Basic question: Can water be scarce on a farm that has a conveniently located well producing 2,000 gallons of water a day?

II. Ambiguous word: "scarce"

III. Different meanings: scarce$_1$: hard to find, rare.

scarce$_2$: not enough

IV. Question repeated for each meaning of the ambiguous word:

(a) Can water be scarce$_1$ on a farm that has a conveniently located well producing 2,000 gallons of water a day?
No.

(b) Can water be scarce$_2$ on a farm that has a conveniently located well producing 2,000 gallons of water a day?
Yes. (The farmer may not have enough.)

Study the analysis above.

Why is the answer to the question IV (a) "No," but the answer to question IV (b) "Yes?"

_____(a) Because question IV (b) is answered incorrectly.

_____(b) Because definition number one is incorrect.

_____(c) Because the meaning of the question is different as a result of the different definitions of "scarce."

(c)

FRAME 15

Now let's apply the MacKaye's method to still another example. Sometimes confusion arises in the study of economics over the meaning of the word "efficiency." In economics, we define this word differently than the average person would:

Economist's definition: The ratio of output over input; that is, the relationship between the units of scarce resources that are put into the process of production and the resulting output of some wanted product.

(FRAME 15 - continued)

Conventional definition: Highly capable operation.

With this in mind apply the MacKaye's method to analyze the following argument. (In Step IV don't forget to number the ambiguous word to indicate the definition that you intend.

Barbara Korrekt

Barbara Korrekt is a secretary for a company called Speed Research. She is a very pricise person and rarely makes errors. The letters and other materials she types are neat and exact. In the president's office we hear "top brass" discussin Barbara's work:

Mr. Topman (president):	She is efficient, I tell you I've never known her to make a mistake.
Mr. Mudlow (vice-president):	Efficient? Do you call this efficiency? Here, look at this letter. She spent four hours typing it--I could have done it myself in 30 minutes.

(FRAMEE15 - continued)

Mr. Topman: But Barbara's work is so precise, so thorough.

Mr. Mudlow: But does she produce? Her efficiency ratio is .25. She types two letters every eight hours.

Mr. Topman: What do you mean efficiency ratio? Is she efficient or isn't she? I think she does excellent work.

Mr. Mudlow: Well, in my mind a person who is efficient should be able to type 20 letters in 8 hours.

I. The basic question: ________________________

____

II. Ambiguous word: ________________________

III. Different definitions:

____

____

IV. Question repeated, and answers:

Questions	Answers
________________________	__________
________________________	__________

I. Is Miss Korrekt efficient?

II. efficient.

III. efficient_1: precise, thorough, doesn't make mistakes.

efficient_2: capable of typing 20 letters in 8 hours.

IV. Is Miss Korrekt efficient_1? Yes.

Is Miss Korrekt efficient_2? No.

You have learned to apply the MacKaye's method and have seen why it is important to be careful about defining terms in the study of economics. In the next section of this program you will learn to distinguish precise definitions from those that are not so precise.

* * *

FRAME 16

What we have been discussing so far has some importance, but do you think this has anything to do with economics. (Your opinion)

_____(a) Yes.

_____(b) No.

We asked for YOUR opinion. Either answer is acceptable.

IF YOU ANSWERED YES (a), go ahead to Frame No. 18.

IF YOU ANSWERED NO (b), go ahead to Frame No. 17.

FRAME 17

You say you don't think all this is important for the study of economics. O.K.--we'll try to explain.

Suppose an economist wants to determine whether a certain government program is helping to reduce unemployment. How is he going to decide whether to classify a person as employed or unemployed. Are teenagers going to be counted? Housewives? (They work in the home, even if they don't get paid.) How many hours must one work before being counted as employed. What about volunteer work? Must a person be a paid employee before he is considered employed? What about farmers?

We need a clear, precise definition of "employed person," before we can measure employment or unemployment.

In the next section of the program you will learn some principles that should be followed in writing a precise definition.

Go on to Frame 18.

FRAME 18

We have tried to show that it's important to be careful in your use of words, particularly in a social science such as economics. Often, the greatest difficulties arise with words so common that we take them for granted.

For example, because we use them so often, you might expect that most people would have a pretty good notion of what is meant by such words as "justice," "freedom," and "progress."

(FRAME 18 - continued)

Rate the following statement as true or false:

> Everyone agrees on the basic meaning of words such as "justice," "freedom," and "progress."
>
> ____(a) True.
>
> ____(b) False.

If you answered (a) True, go to Frame No. 19.
If you answered (b) False, go to Frame No. 20.

FRAME 19

Here is a simple experiment that may convince you that people do not agree on the basic meaning of these words.

Ask five people, individually, to define the word "freedom." Tell them you are doing an experiment to see how people define this word. Write down each definition, word-for-word, as each person gives it to you. When you have all the definitions written down, compare them. Write a short paragraph that summarizes your conclusions.

> Do this (if you want to) and turn it in as part of this assignment.
>
> When you are ready, continue with Frame 20.

FRAME 20

When you have a precise definition you can look at anything in the world & decide whether or not it fits your definition.

We are going to give you six principles that will help you make your definitions more precise. Here's the first:

1. A definition should state the general class that the thing to be defined belongs to.

Suppose you want to define "apple." IN following the first principle you might begin, "An apple is a fruit." The word "fruit" represent the general class of things that an apple belongs to.

> Suppose you want to define "robin."
>
> In following the first principle, you would write:

(FRAME 20-continued)

> A robin is a bird.
>
> (Bird describes the general class of things to which a robin belongs.)

FRAME 21

Dows the following illustrate the first principle?

An army tank is a combat vehicle.

_____(a) Yes.

_____(b) No.

If your answer is Yes, what one word states the general class that an army tank belongs to?

____

> (a) Yes, the definition does illustrate the first principle. The word vehicle states the general class.

FRAME 22

Here's the second principle:

2. State in detail the special characteristics which set the thing to be defined apart from other similar things.

A robin is a bird, but there are many kinds of birds. A precise definition must list the special characteristics which set robins apart from other birds. One such characteristic is "having the breast and underparts mainly dull-reddish in color." However, some birds that are not robins have dull-reddish breasts and underparts.

A robin is a bird that has a breast mainly dull-reddish in color; its underparts are also chiefly dull reddish.

Does this definition follow principle #1? Principle #2? (Explain)

____

____

(FRAME 22 - continued)

Yes, the definition follows the first principle. No, it doesn't follow the second. The definition states the general class that robins belong to; namely, birds. However, it does not list all the characteristics that are necessary for a precise definition of a robin.

FRAME 23

In following the second principle, the more distinguishing characteristics we list in our definition the more precise it is. Also the more exactly we state those characteristics, the more precise our definition will be.

A robin is a bird that has the following physical characteristics:

(a) It is of medium size.
(b) Its breast and underparts are mainly dull-red.
(c) Its upper parts are olive-gray.
(d) Its head and tail are black.
(e) It "sings" and perches on tree branches or telephone wires, etc.

Now this is the most precise definition we have had so far, but if we wanted to make it more scientific, it could still be improved.

In making definitions precise it is a good idea to state characteristics in terms of measurements whenever possible. Instead of saying that a hurricane is a very strong wind, you could be more precise and say that it is a wind with a speed over 75 miles per hour.

Which of the following phrases used in the definition of a robin could most readily be stated in measurable terms?

____(a) It is of medium size.

____(b) Its breast and underparts are mainly dull-red.

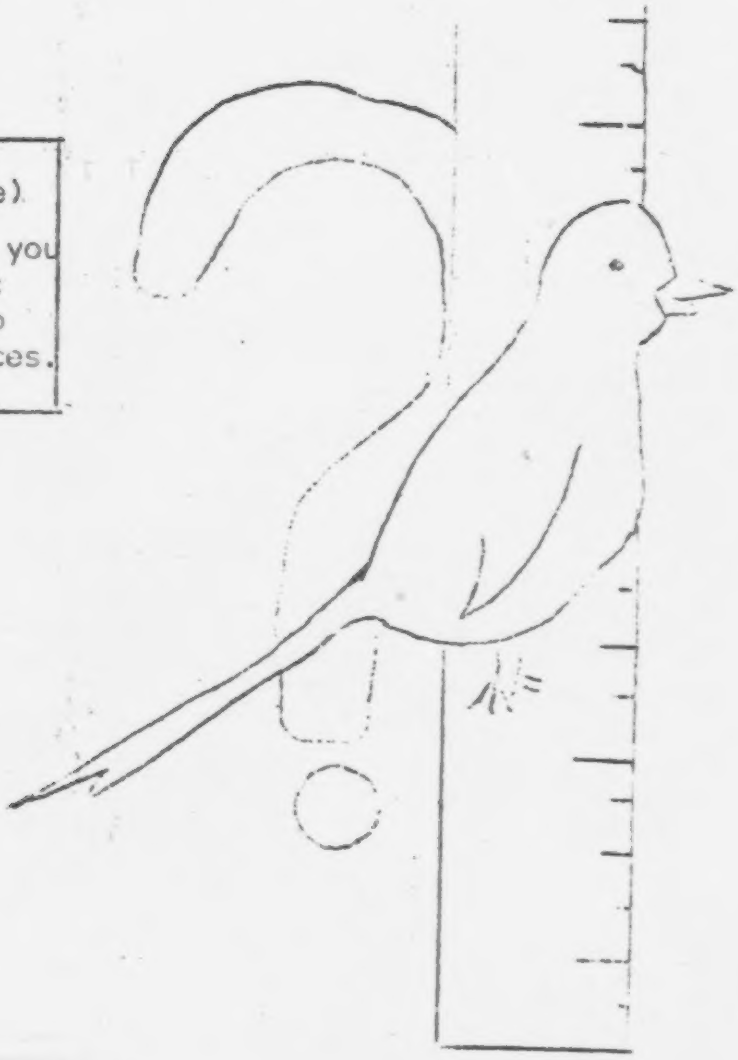
____(c) Its upper parts are olive-gray.

____(d) Its head and tail are black.

(FRAME 23 - continued)

Phrase (a) (It is of medium size)

In defining the size of a robin you might state something like this: It is 5 to 7 inches from tail to beak and weighs from 4 to 6 ounces.



FRAME 24

Here is the third principle:

Avoid figurative expressions and unclear terms.

To understand this, you must know what is meant by "figurative expressions.' An illustration will help. If someone says, "Let's get down to brass tacks," he doesn't mean that we should bend down and get close to some tacks on the floor. He has used a figurative expression and means, perhaps, "Let's start discussing the really important matters in this situation."

A figurative expression, then, is an expression that has a meaning other than the usual one associated with the words used.

Which of the following sentences contain a figurative expression?

_____(a) Both sisters got a candy bar, but their brother was left out in the cold.

_____(b) "I really hit it off with Bob!"

_____(c) "I want you to get home before midnight; do you hear?"

(FRAME 24 - continued)

(a) & (b)

FRAME 25

Here's the third principle again:

Avoid figurative expressions and unclear terms.

With this in mind, pick out the most precise definition from the following:

_____(a) A woman is an adult femal person.

_____(b) A woman is a femal person who has completed her physical growth.

_____(c) A woman is the epitome of muliebrity--the fair sex whose delicate way is able to subdue man. She is beautiful as was bright Lucifer before his fall.

_____(d) A woman is a person whose cheeks glow like living roses and whose thoughts change like winter weather.

(b)

FRAME 26

So far ~~we have~~ seen that a precise definition. . .

(1) States a general class of which the thing to be defined is a member.
(2) States the distinguishing characteristics of the thing defined, using measurable terms when possible.
(3) Avoids the use of unclear or figurative language.

Now, here is the fourth principle:

Use positive terms.

That is, the definition should describe what something is--not what it is not.

(FRAME 26 - continued)

According to this principle, which of these is more precise?

_____(a) A harpsichord resembles a grand piano, but its tones are not produced by a felt hammer striking its strings.

_____(b) A harpsichord resembles a grand piano, but its tones are produced by metal quills that pluck its strings.

(b) is correct.

(a) tells that the harpsichords' tones are NOT produced by a felt hammer striking its strings, but it doesn't tell how the tones are produced.

FRAME 27

The fifth principle:

Do not merely repeat the word or some form of the word being defined.

Here are examples of violations of this principle:

remission: The act of remitting.

relativity: The state of being relative.

Which of the following does NOT violate this principle?

_____(a) regularize: To make regular.

_____(b) Reciprocation: The act of reciprocating.

_____(c) Repeat: to say or utter again.

(c)

FRAME 28

Here is our final principle:

> Give examples and non-examples of the thing you are defining.

With reference to this principle, how could the following be improved?

> Tool: An instrument that a person takes in his hand and uses to help in a mechanical operation, as a hammer, saw, plane, file or the like.

____

____

____

____

It could be improved by giving examples of things that would not be considered tools, such as a   , a pencil, etc.

FRAME 29

Here are the six principles for precise definitions. We suggest that you copy them for future reference and also to help you memorize them.

1. State a general class of which the thing to be defined is a member.
2. State the distinguishing characteristics of the thing defined, using measurable terms when possible.
3. Avoid the use of unclear or figurative language.
4. Use positive terms.
5. Do not merely repeat the word or some form of the word being defined.
6. Give examples and non-examples of the thing you are defining.

(FRAME 29 - continued)

See if you can use the six principles in picking out the most precise definition from the following. Explain why you chose the one you did--what rules were followed when this definition was written?

_____(a) Poor people are those who are poorly paid.

_____(b) Poor people are those who are needy or impoverished.

_____(c) Poor people are those who are lacking in some normal or desirable riches or goods.

_____(d) Poor people are those who cannot enjoy minimum standards of living with respect to food, clothing, housing, medical care, and other necessities.

_____(e) Poor people are those who are members of a family whose money income is under $3,000 a year, or any single person earning less than $1500 a year.

(e) is best because it gives a measurable characteristic of the poor. It sets up a definite standard: $3,00 a year for family income, or $1500 a year for a single person.

FRAME 30

Identify the most precise definition from the following. Again, list the reasons for your choice. A drunk is.

_____(a) One who is overcome by alcoholic liquor to the extent that he cannot walk a straight line or hold his hands steady.

_____(b) One who has had too much alcohol to drink and has lost control of his faculties.

_____(c) A person whose blood has an alcohol content of .10% or more.

(c) is the most precise definition. This definition makes it possible to determine who is and who is not drunk on the basis of a measurable characteristic: the alcohol content of the blood.

FRAME 31

Now that we have studied the characteristics of precise definitions, let's review the MacKaye's method of analysis. Imagine two people arguing about whether capital punishment is a form of murder. Write down the steps of the analysis. Use your imagaination to supply the details.

____

____

____

____

____

____

____

____

Your answer should look something like this: Your answer will probably differ in Step 3.

I. The basic question: Is capital punsihment a form of murder?

II. Ambiguous word: murder.

III. Different definitions:

murder$_1$: To kill a human being.

murder$_2$: To kill a human being unlawfully.

IV. Repeat questions:

Is capital punishment a form of murder$_1$? Yes.

Is capital punishment a form of murder$_2$? No.

FRAME 32

Use the four steps of the MacKaye's method on this situation:

Two teachers are arguing about a student:

A: "No, I don't think Bob is a good student; he has only a "C" average."

B: "But there are other qualities that a good student must have beside good grades."

C: "Hmm, if Bob had a "B" average, I might consider him a good student."

D: "But he's so outstanding when it comes to leading class discussions, and he does a lot in after-school activities and student government. These are the important qualities of a good student. To me he is a good student."

I. The basic question: Is Bob a good student?

II. Ambiguous word(s): Good student

III. Different Definitions:

good student$_1$: A student with a "B" average.

good student$_2$: A student who is outstanding in leading class discussions etc.

IV. Repeat questions:
Is Bob a "good student$_1$?" No.

Is Bob a "good student$_2$?" Yes.

FRAME 33

Which of the following statements best explains why the two teachers cannot agree about Bob?

(pick one)

_____ (a) A difference of opinion makes it hard to communicate.

_____ (b) They have different opinions about what Bob is like.

_____ (c) They did not define the phrase "good student."

_____ (d) One teacher is unfair.

(c)

Remember this whenever you get into an argument or are called upon to analyze or settle one: most disputes revolve around an ambiguous word which is defined differently by those who are arguing.

FRAME 34

We have seen how confusion over intended meaning can be avoided by defining terms. Suppose you are reading a book on economics and you come across a word you do not understand. What would be the better thing to do first?

_____ (a) Try to determine how the author of the book would or does define the term.

_____ (b) Look the word up in a good dictionary.

(FRAME 34 - continued)

(a) Although it is a good idea to check the meaning of unfamiliar words in a dictionary, the first thing that you should do is to try to determine how the author himself defines the word in question

FRAME 35

In economics, we often use specialized definitions for certain words because of the need to be precise. A dictionary gives us generalized meanings. These generalized meanings may bear little resemblance to the specialized meanings that an economist intends.

Don't think that economists are the only people who do this! Your definition for "rock n' roll" may well be quite different and more precise than the one given in the dictionary in the library.

The point we're trying to make is a simple one: It's a good idea to memorize important definitions in economics. But, why is this good?

_____ (a) The main reason for memorizing definitions is that hard mental exercise is good for you.

_____ (b) To perform certain kinds of analysis, you have to spell exactly what it is you are measuring or comparing.

(b) Memorizing as a form of mental exercise is NOT a good reason. Tests show that people who have done a lot of hard work memorizing, don't improve their ability to memorize or think clearly.

If you are asked to learn definitions, it is because you need to have certain words at your finger tips in order to carry out intelligent analyses or discussions in economics.

FRAME 36

The last frame made an important point. We are NOT making you practice working with definitions because we feel that hard work is good for you. Definitions are important because of the things they enable us to do. They are tools for problem solving. For example, if we have a precise definition of, say, "poor people," we can try to measure how many people in a given year were "poor." Without a precise definition, this is not possible.

From what you have read up to this point, when would you think would be the better time to define terms?

_____(a) At the beginning of a discussion.

_____(b) At the end of a discussion--after the term has been used to make important points.

> We feel that (a) is the better answer.

FRAME 37

Some people feel that a term should be defined at the end of a discussion. They argue that you can't define a term properly until you have had a chance to show how you intend to use it or until you have defined other related terms. Others point out that the object of a discussion my be to clarify a definition and that a good discussion should precede the setting forth of the definition.

Usually, however, the sooner you define terms, the sooner you communicate your intentions. Unless you are trying to trick or confuse your listeners, we recommend that you define terms at the start. The points you want to make may not get made unless you DEFINE TERMS. If you wait until after you've stated your position, you are taking the chance of being misunderstood.

Which example below illustrates our position on the question of when to define terms?

_____(a) "Time is running short so I feel that I must summarize and then present my idea of what is meant by 'scarce productive resources.'"

_____(b) "I thought it would be a good idea to tell you at the start my conception of what a 'scarce productive resource' is."

(FRAME 37 - continued)

(b). Define your terms at the outset. Then you avoid the trap of having each person discuss something different--while thinking that all were talking about the same thing.

FRAME 38

You don't have to give a long, involved definition every time you begin a discussion. You should, however, try to define as clearly as possible any ambiguous words that you feel might come up.

As you study this course you will be required to memorize specialized definitions for words such as "efficiency," "capital," "savings," etc. These definitions are more precise than the usual ones given for these words.

In writing these definitions, the economist's goal is to design a precise classification system. He wants to be able to define, say, "the steel industry" so that he can look at all the different industries in the nation and decide which to put in the "steel industry classification."

With this in mind, would you say that the following definition of "poverty" is one that an economist might use in a statistical study?

"Quality or state of being poor or indigent; need; destitution."

_____(a) Yes

_____(b) No.

(b). No, the definition has too many ambiguous words. One could not precisely classify an area as poverty-stricken or otherwise, using this definition. A precise definition, remember, should state the measurable characteristics of the thing being defined.

FRAME 39

It should be clear that economists often use generalized/specialized
(pick one)
definitions in an effort to be precise. The meaning that "the man on the street" has for a certain word is often different from/the same as the
(pick one)
meaning intended by the economist.

specialized

different from

FRAME 40

We said earlier that in this course you should memorize specialized definitions. Why do you think you are required to do this? That is, how will doing this help you in your studies? (write your answer)

____

____

____

____

Answers will vary but your answer should say something about avoiding misunderstandings in your study of economics.

FRAME 41

The test on the following pages summarizes what you should have learned in this program. Before taking it, however, turn back to the introduction on page one. You should be able to do the four things listed there. If you feel weak in any of the four areas listed, review the appropriate frames before taking the test. Good luck.

CRITERION TEST

1. Which of the following are true statements about definitions?

_____ (a) The main reason for memorizing definitions is that hard mental exercise is good for you.

_____ (b) The proper place for a definition is at the end of a discussion--after the term has been used and one has had a chance to build up to it.

_____ (c) Economists, like other scientists, often rely on specialized definitions that set measurable limits on what may belong to a given classification of things.

_____ (d) In economics, whenever something measurable is being discussed, it's wise to make sure you know the definition.

_____ (e) A scientist tries to make his definitions precise so that there are no "maybe's;" he should be able to look at everything in the word and decide whether or not it fits into his definition.

2. Two people are arguing about the following question:

Is consumption taking place when a boy buys a ticket to a movie?

Assume that the dispute results from a misunderstanding about the meaning of words. Use the four steps of the MacKaye's method to clarify the argument. Write out your answer.

____

____

____

____

____

____

____

____

3. What is the main cause of misunderstanding in the following dialogue? That is, why didn't the two girls communicate with each other? How could communication have been improved?

Jane: Hey, Sue! I think John is going to ask me to go out this weekend!

Sue: Say, he's really a nice guy. He's really got an interesting personality and his car is just great.

Monday morning the girls meet at school.)

Jane: (Angrily) Sue, I'll never speak to you again!

Sue: (Bewildered) What did I do? Didn't you like John's V.W.?

Jane: You told me his car was really something!

Sue: It is! V.W.'s are great little cars.

Jane: I was expecting a Cadillac...and his personality! All he did was talk about basketball all night, and--

Sue: He's a great guy, I tell you. I just love basketball and John has such a wonderful voice. He really knows how to express himself.

____

____

____

____

4. Which of the following definitions is most precise? Explain which principles were followed in the writing of the most precise definition. Quote parts of the definition that illustrate how each rule was followed.

_____(a) An employed person is one aged 16 or older and who is engaged to work at a definite task for wages. He (or she) must be a civilian and must have worked several hours each week. Housewives may not usually be counted as employed. People who do volunteer work are sometimes excluded from that group which is counted as employed.

_____(b) An employed person is one who has a calling and who has clearly demonstrated beyond doubt that he has worked during a given week.

____(c) Employed persons comprise: all older teenage and adult civilians who, during the specified week, did any work at all as paid employees or in their own business, profession, or undertaking, or on their own farm, or who worked several hours as unsalaried laborers on a farm or in a business operated by a person of their own family.

____(d) Employed persons are civilians aged 16 or older who answer "Yes" to any one of these three questions:

1) Did you work at all as a paid employee this week?
2) Did you work at all in your own business or profession or on your own farm this week?
3) Did you do 15 hours or more of unpaid work this week on a farm or business operated by a mamber of your family.

If a person answers "Yes" to the following question he is NOT employed: Was your ONLY activity this week work around the house or volunteer work?

Mary Smith, for example, works 50 hours every week cleaning house and taking care of her 4 children; she is not employed.

Carl Jones works 20 hours a week in his father's store; he is employed.

Mark Adams works 7 hours a week on his paper route; since he is 15, he is not counted as employed.

____(e) An employed person is one who is 16 or older and who is not unemployed. Persons in the armed services and those who have done 15 hours of unpaid work for a friend who is not a member of their family are not employed. Also excluded from the employed group are persons whose only activity consists of work around the house (such as housework, painting, or repairing own home, etc.) or volunteer work for religious, charitable, and similar organizations. To illustrate, Mark Adams who is 15 and has a paper route is not counted as employed since he is too young. Ralph Blackwood, a private in the Army, works hard every day and receives a salary, but he is not counted as being in the employed group.

ANSWERS TO CRITERION TEST

1. (c), (d), and (f) are true statements about definitions.

2. Step 1. Basic question: Is consumption taking place when a boy buys a ticket to a movie?

   Step 2. Ambiguous word: consumption.

   Step 3. Different meanings:

   consumption$_1$ -- to spend money, to purchase something.

   consumption$_2$ -- to eat something.

   Step 4. Questions repeated:

   Is consumption$_1$ taking place when a boy buys a ticket to a movie? Yes.

   Is consumption$_2$ taking place when a boy buys a ticket to a movie? No.

   (Your definitions in Step 3 may not be the same as those used here, but you should have two definitions. In Step 4, the answer to one question should be "yes," and to the other, "no.")

3. The girls failed to define terms. They would have communicated better with each other if they had taken the trouble to discuss what each meant by expressions such as "nice guy," interesting personality," and "great car."

4. Definition (d) is the most precise. It states the distinguishing characteristics of the thing defined in measurable terms.

   In addition, it identifies a general class (civilians) of which the thing defined is a member; it avoids unclear or figurative language; unlike some of the other examples, it states the definition in positive terms, and it gives examples and nonexamples of employed persons (Mary Smith, the housewife, and Carl Jones, who works in his father's store.)

UNIT I

LESSON 2

LESSON CRITERION TEST

(on items not included in programs)

1. Match the terms in column 1 with the best definition in column 2. In the space provided before each term in column 1, write the letter from column 2 which corresponds to the correct definition.

_____ a. inputs

_____ b. Production

_____ c. capital

_____ d. consumption

_____ e. outputs

_____ f. distribution

_____ g. labor

_____ h. goods

_____ i. services

A. All man-made inputs or improvements in natural resources.

B. result of a production process

C. tangible output capable of satisfying wants.

D. all factors of production

E. output which is consumed at the same time it is being produced

F. human production input

G. production activities related to making outputs available to consumers.

H. final use of goods and services to satisfy wants

I. the activities related to converting inputs into goods and services.

2. In the space provided in front of each item in this list, write whether the item is an example of capital, labor resource, natural resource, a good, a service (output). If some items fall into more than one category, list all of the categories.

____________________ a. cornfield

____________________ b. Pacific Ocean

____________________ c. college teacher

____________________ d. engine overhaul

____________________ e. steel ingots

____________________ f. truckdriver

____________________ g. bus

____________________ h. cosmetics

____________________ i. pop concert

____________________ j. wild ducks

____________________ k. highways

____________________ l. warehouse

3. In the space provided in front of each example below, state whether the type of business produces a good or a service or both. After the item state what the good and/or service might be if there is any question in your mind.

____________________ a. telephone company ____________________

____________________ b. airline company ____________________

____________________ c. manufacturing co. ____________________

____________________ d. commercial banks ____________________

____________________ e. silver mining co. ____________________

____________________ f. cotton farm ____________________

____________________ g. restaurant ____________________

____________________ h. hospital ____________________

____________________ i. drug store ____________________

4. Give examples of round-about production in dairy farming.

5. What are some of the major stages of production in providing U.S. families with milk:

a. ____________________ c. ____________________

b. ____________________ d. ____________________

6. Using the home construction industry, supermarkets, or agriculture as your source, give an example of each of the three kinds of specialization described in the text:

1. resource

2. division of labor

3. use of capital

NOTE: Questions on production efficiency and diminishing returns are not included because you have already completed a criterion test on them.

UNIT I
LESSON NO. 2

LESSON
CRITERION TEST ANSWERS

1. a. D

   b. I

   c. A

   d. H

   e. B

   f. G

   g. F

   h. C

   i. E

2. a. natural resource, capital, goods

   b. natural resource

   c. labor, capital

   d. service

   e. capital

   f. labor, capital

   g. capital, good

   h. service

   j. natural resource

   k. capital, good

   l. capital, good

3. a. service, good (telephone)

   b. service

   c. good

   d. service

   e. good

   f. good

   g. good (meal), service, (place to eat and service)

   h. service

   i. Service (the goods are produced elsewhere)

4. There are lots of answers here. Some include these: breeding the herd of cows. building farm buildings, manufacturing farm equipment, and materials, etc.

5. Many possible answers: e.g.

   a. breeding herds of cows

   b. dairy farming

   c. milk processing (pasteurizing, etc.)

   d. wholesale distribution

   e. retail distribution

ANSWERS TO LESSON CRITERION TEST (continued)

6. Many possible answers, e.g.:

    1. plumbers, butchers, orchards

    2. meat department of a supermarket where butcher does meat cutting, girls do packaging, someone else weighs and prices packages

    3. harvester, electric milkers, supermarket, prefabricated parts of buildings

LESSON 3

UNIT 1
EXERCISE 1

EXCHANGE AND BARTER

The people working in the pin factories described by Adam Smith couldn't eat what they produced. They were specialists. They had a problem that had to be solved, how to exchange pins for food and the other necessities of life. By Adam Smith's time, people had money so that exchanges could easily be made. However, exchange does not always depend upon money.

Father Lafitan, a Jesuit priest, described how American Indians traded some three hundred years ago:

> "The savage nations always trade with one another. Their commerce is, like that of the ancients, a simple exchange of wares against wares. Each has something particular which the other does not, and the traffic makes these things circulate among them. Their wares are grain, porcelain, furs, robes, tobacco, mats, canoes, work made of moose or buffalo hide and of porcupine quills, cotton beds, domestic utensils--in a word, all sorts of necessities of life required by them."

Some world traders, who deal in basic commodities, make barter exchanges. Below is a table showing exchange rates for 4 such commodities. This table (or matrix) can be read across rows or up and down columns. For example, the exchange rates for burlap are 2.0, .40, and .50. This means that 1000 lbs. of burlap can be exchanged for:

2.0 x 1000 lbs. sugar = 2000 lbs. sugar
.40 x 1000 lbs. coffee = 400 lbs. coffee
.50 x 1000 bushel soybeans = 50 bushels soybeans

Number of Units For Exchange

	1000 yds. burlap	1000 lbs. sugar	1000 lbs. coffee	100 bushels soybeans
1000 yards burlap		2.0	.40	.50
1000 lbs. sugar	.50		.20	.25
1000 lbs. coffee	2.5	5.0		1.25
100 bushels soybeans	2.0	4.0	.80	

1. What is the price of 1000 lbs. of coffee?

of one lb. of coffee?

2. What is the price of 100 bushels of soybeans?

3. What is a price in this kind of barter exchange?

4. Assume the price of burlap is 25¢/yard. Use the exchange rates to find the dollar price of the other three commodities:

price of sugar = _______ per pound

price of coffee = _______ per pound

price of soybeans = _______ per bushel

5. What are the disadvantages of barter prices as compared to prices quoted in dollars?

a.

b.

6. Which of the three functions of money are we talking about? (check one)

_____ medium of exchange

_____ unit of account

_____ store of value

LESSON 3

UNIT 1
EXERCISE 2

WHAT IS MONEY?
(It's functions and qualities)

Money is one of the basic inventions of mankind. The invention has been made by most societies and has undergone thousands of years of refinement. One way to understand what money is, and what purposes it serves, is to describe our own money and then compare it with more primitive money forms.

In the U.S.A., paper currency serves three functions:

1. It is generally accepted as a medium of exchange. That is, almost anyone is willing to sell something in return for legal tender (cash).

2. It is a unit of account (standard of value is another way to say the same thing). That is, prices of things for sale are quoted in currency units (dollars or fractions of dollars). Also records of sales (bookkeeping) keep account of the dollar value of purchases; sales and things owned by a business or some other organization.

3. It is a store of value. Because currency is a medium of exchange, people often accumulate their wealth by saving money. You can always spend it when you want to.

These three functions are not served by money in all societies. The importance of money in providing these services in our exchange system may appear clearer if we contrast our use of money with its use in simpler societies.

> As recently as 25 years ago, the people of the South Pacific Island of Yap were using big wheel-shaped stones as money. The stones ranged in diameter from the size of a dinner plate up to twelve feet, and their value depended on size, difficulty of manufacture and the artistry of their surface carvings. The stones had no use except as money although the islanders, understandably, liked to have them stand outside their houses for all to see.
>
> Most of the trade of Yap took place in local markets and was carried out by barter, using shell money and a variety of commodity moneys including coconuts, tobacco, cups of syrup and baskets of taro (an edible root). The last two served as units of account. Small stone money was used in the market place and was given a value in terms of one of the commodity units of account.
>
> The larger stones were used for more complex financial transactions. Debts were contracted in terms of stone money, and stone money was lent out at interest, which was customarily paid in shell money. Stone money was also used for political payments such as those to another tribe in return for aid in an inter-tribal war.

A second example, the use of furs as currency by the Indians of North America, is by contrast, much easier to understand. Records of the Hudson Bay Company for the 18th and 19th century show beaver skins as the chief medium of exchange. A hundred years ago in Saskatchewan, a horse was reckoned to be worth about 20 beaver skins; a wolf skin was equal to 1/2 a beaver skin. All other skins are valued according to their equivalent in beaver.

Questions:

1. a. What functions did the large stone money serve on the island of Yap?

____

b. What trouble would there be using them for the other functions?

____

____

2. What functions did the shell money and baskets of taro serve?

____

____

3. a. What characteristics of cups of syrup and baskets of taro made these items a good unit of account?

____

b. What difficulties would there be using them as a medium of exchange?

____

____

4. Can you suggest a theory to explain why the islander used so many different kinds of money? Why didn't they just have one kind of thing serve as money?

____

____

____

5. Which of the functions of money did the beaver skins fulfill for the Indians of North America?

____

____

6. What difficulties are there in using beaver skins as a medium of exchange, a unit of account, a store of values?

____

____

____

7. Why do we use both coins and paper currency?

8. Are there things in our society, other than coins and currency, which serve one or more of the functions of money? List and state which function:

9. Which of the following would make the best kind of money for the U.S.: gold coins, paper currency issued by the Federal government, paper currency issued by private banks? Explain why:

10. Check the qualities money should have in the U.S. Star the most important characteristics.

_____ a. convenient to carry or use

_____ b. plentiful

_____ c. valuable as an input or output

_____ d. scarce

_____ e. expensive to create

_____ f. capable of being measured or counted exactly

_____ g. indestructible

_____ h. generally accepted in exchange

_____ i. inexpensive to produce

LESSON 3

UNIT 1
EXERCISE 3

THE U.S. MONEY SUPPLY

The money supply of every modern economy is determined by regulations and laws defining what is legal tender (money that can be used, and must be accepted, in payment of a debt), or what is counted when the government publishes statistics on the Country's money supply. In the U.S. gold bullion (bars of gold) or coins, which might be readily acceptable in exchange by people) are not allowed to circulate so they are not money. Credit cards, which a person uses to buy many things, are not defined as money.

The official definition of the U.S. money supply is quoted here and the table below gives data on the amount and composition of the money supply in recent years.

> "The supply of money, in the sense of a means of payment, is defined broadly to include bank deposits and currency." Prior to 1934, gold was also a part of the means of payment, but in January of that year, it was withdrawn from circulation, and since then gold has served as a means of settlement of international accounts only and is purely reserve money domestically.
>
> "As used here, the term 'currency' includes coin and paper money issued by the Government. --- All currency is now issued by the Federal Reserve banks and the U.S. Treasury . . .
>
> "At one time gold was the basic form into which all other types of currency could generally be converted. At present, however, the gold stock in most countries is held largely or entirely by central banks and Government Treasuries as legal reserves against note and deposit liabilities or for stabilizing exchange rates. All gold belonging to the United States is held by the Treasury Department. Private gold holdings are forbidden except in limited amounts for licensed purposes."[1]

---

[1] Robert W. Burgess, Historical Statistics of the U.S. Colonial Times to 1957. Bureau of Census, Dept. of Commerce, U.S. Government Printing Office, 1960, p. 644.

THE U.S. MONEY SUPPLY AND KINDS OF U.S. CURRENCY OUTSTANDING AND IN CIRCULATION

April 1967

(in millions of dollars)

Kind of Money	Total Outstanding	Currency in * Circulation
Currency		
Gold	$ 13,109	-------
Gold certificates	(12,604)**	-------
Federal Reserve Notes	40,855	$ 38,244
Treasury Currency	6,563	5,486
Standard Silver Dollars	485	482
Silver bullion	664	--------
Silver certificates	(556)**	547
Fractional coin	5,000	4,069
United States Notes	323	301
In process of retirement	92	88
TOTAL CURRENCY	$ 80,251	$ 43,730
Commercial Bank Demand Deposits***	$133,100	$133,100
TOTAL MONEY SUPPLY	$213,351	$177,554

* Outside treasury and Federal Reserve Banks. Includes any paper currency held outside the U.S. and currency and coin held by commercial banks.

** Not included in the totals. The gold and silver certificates are backed by the gold and silver bullion--they are receipts for the bullion. Thus, counting both the metal and the certificates would be counting the same thing twice.

*** Figures exclude interbank deposits, which do not represent money available to the public and checks in process of collection, inclusion of which would represent a double counting of deposits.

Source: Federal Reserve Bulletin, No. 6, Vol. 53, June 1967, pp 991-2.

Questions:

1. Why do you think bank "demand deposits" (checking accounts) are included as part of the money supply when "time deposits" (saving accounts) are not included?

2. In the quote at the beginning of this exercise, the third paragraph describes the relation of gold to our money supply -- it is held as a legal reserve. (Ignore the part about stabilizing exchange rates; this refers to money dealings in trade between countries.)

   a. What do you think "legal reserves" are for and why are they necessary?

   b. Is there another way to provide backing for our currency?

LESSON 3

UNIT I
EXERCISE 4

TYPES OF CREDIT AND
FINANCIAL INSTITUTIONS

Borrowing and lending (the use of credit) is also an ancient invention. In fact, credit exists in primitive societies which have not invented money. In these societies, credit probably began with the need to cooperate in time of need. For example, a New Zealand Maori might, at the appropriate season, send some meat or a fowl to someone living at a distance whose hunting season cache was scant. Later, during the fishing season, when his own meat supply is short, he might expect to receive a fish in return. This is not just an exchange of gifts, because the people keep account of these exchanges.

In other simple societies, extensions of credit are a matter of business and more closely resemble credit as used in our society. That is, credit is an advance of purchasing power, loaned against a future ability to repay the debt.

TABLE I

Amounts Outstanding in the U.S. of
Major Kinds of Credit in December, 1966

Type of Credit	Amount Outstanding (Billions of dollars)	
Commercial and Industrial Bank Loans[1]	60.6	
Consumer Credit	94.8	
Mortgage Debt (on buildings)	336.2	
Notes and Accounts Receivable for Corporations	202.8	
TOTAL PRIVATE DEBT		694.4
Federal Government Debt	339.8	
State and Local Government Debt	107.3[3]	
TOTAL GOVERNMENT DEBT		447.1
TOTAL U.S. DEBT		1141.5
GNP (4th qtr., 1966)		759.3[2]

---

[1] Loans of 161 banks are included. This represents about 70% of such loans held by all commercial banks.

[2] Preliminary figure

[3] Figure is an estimate for 30 June 1966; source is from Tax Foundation, Facts and Figures on Government Finance, 1967, p. 24.

Source:

Federal Reserve Bulletin, February 1967, pp. 207, 290, 286, 285, 278.

TABLE II

Amounts Outstanding in the U.S. of
Consumer Credit by Major Categories,
December, 1966

TYPE OF CREDIT	AMOUNT OUTSTANDING (billions of dollars)
Installment Credit:	
Auto	31.0
Other	19.8
Repairs	3.8
Personal	20.1
Non-Installment:	
Single Payment Loans	7.8
Charge Accounts	7.1
Service Credit	5.1
TOTAL	94.9

All of this lending is done by financial institutions, businesses which lend money or provide credit as a major part of their activities. Completing the following table will familiarize you with some of the most important lending institutions in the U.S. Using newspaper or phone-book advertising, information supplied by the businesses, or your own knowledge, complete the following table. For each kind of business listed indicate in Column I whether the business lends to individuals and/or businesses; in Column II list kinds of loans or credit it extends, in Column III, for each kind of loan, state anything you know about credit requirements, and in Column IV enter the interest rate charged.

Source:

Federal Reserve Bulletin, February, 1967, p. 290.

TABLE III

TYPES OF LENDERS, LOANS AND LOAN REQUIREMENTS

	I	II	III	IV
KIND OF BUSINESS	WHO ARE THE BORROWERS?	KINDS OF LOANS OR CREDIT	CREDIT REQUIREMENTS	CURRENT INTEREST RATES
Commercial Banks				
Savings & Loan Assns.				
Credit Unions				
Insurance Co.'s				
Finance Co.'s				
Merchants (stores)				
Investment Banks				
Pawn Shops				

LESSON 3

UNIT I
EXERCISE 5

INTEREST RATES FOR REGULAR BORROWING AND FOR INSTALLMENT BUYING

Credit is a useful way of extending purchasing power and few people go through life without making use of it. Even the most cautious find that they have to use credit for major purchases such as houses and perhaps automobiles. But making use of credit means that purchasing power has been created, and purchasing power, like any other scarce resource, is bought at a price.

The price of credit is called its **INTEREST RATE** because the price of borrowing money is quoted as a percentage of the amount borrowed, to be paid per unit of time (i.e., per month, per year, etc.). The formula for figuring a simple interest rate is:

$$i = \frac{Cx100}{P}$$

where i = interest rate

C = interest charges (the total amount you pay for borrowing the money). Multiplying C by 100 means the rate is expressed as a percentage.

P = the principal (the amount of money borrowed)

If you borrow \$100 for a year and pay back \$106 at the end of the year, then the interest rate on the loan is:

$$\frac{Cx100}{P} = \frac{\$6x100}{\$100} = \frac{600}{100} = 6\ \%\text{ per year}$$

The interest-rate charge for borrowing money varies depending on the conditions surrounding the loan. Important factors are the time period needed to repay the loan and the risk of lending the money. The risk depends mainly on how able and how likely the borrower is to pay back the loaned money and whether or not he can offer protection to the lender, if he cannot repay the loan. Generally speaking, interest rates are low if there is not much risk involved in lending the money, high if there is risk; sometimes the risk is high enough to make it impossible to borrow money at any price.

Interest rates vary for other reasons, too. One is simply that some lenders charge more than others. This may not be as easy to spot as it seems. In fact, national surveys have shown that most people have little idea of the true cost of credit. In large part, this is because there are many ways of quoting interest rates. Often it is extremely difficult to figure what the true interest rate is just by having the lender state the terms of the loan. Particularly when you buy something and pay by installments, the true interest rate is not the figure quoted by the lender.

For example, most people buy a car in installments. That is, they pay a down payment for the car, borrow the balance to pay off the car dealer, and then pay back the loan in monthly installments. Let's say that \$1000 is needed to pay off the car dealer. If \$1000 is borrowed, to be repaid in monthly installments over one year, the lender may calculate:

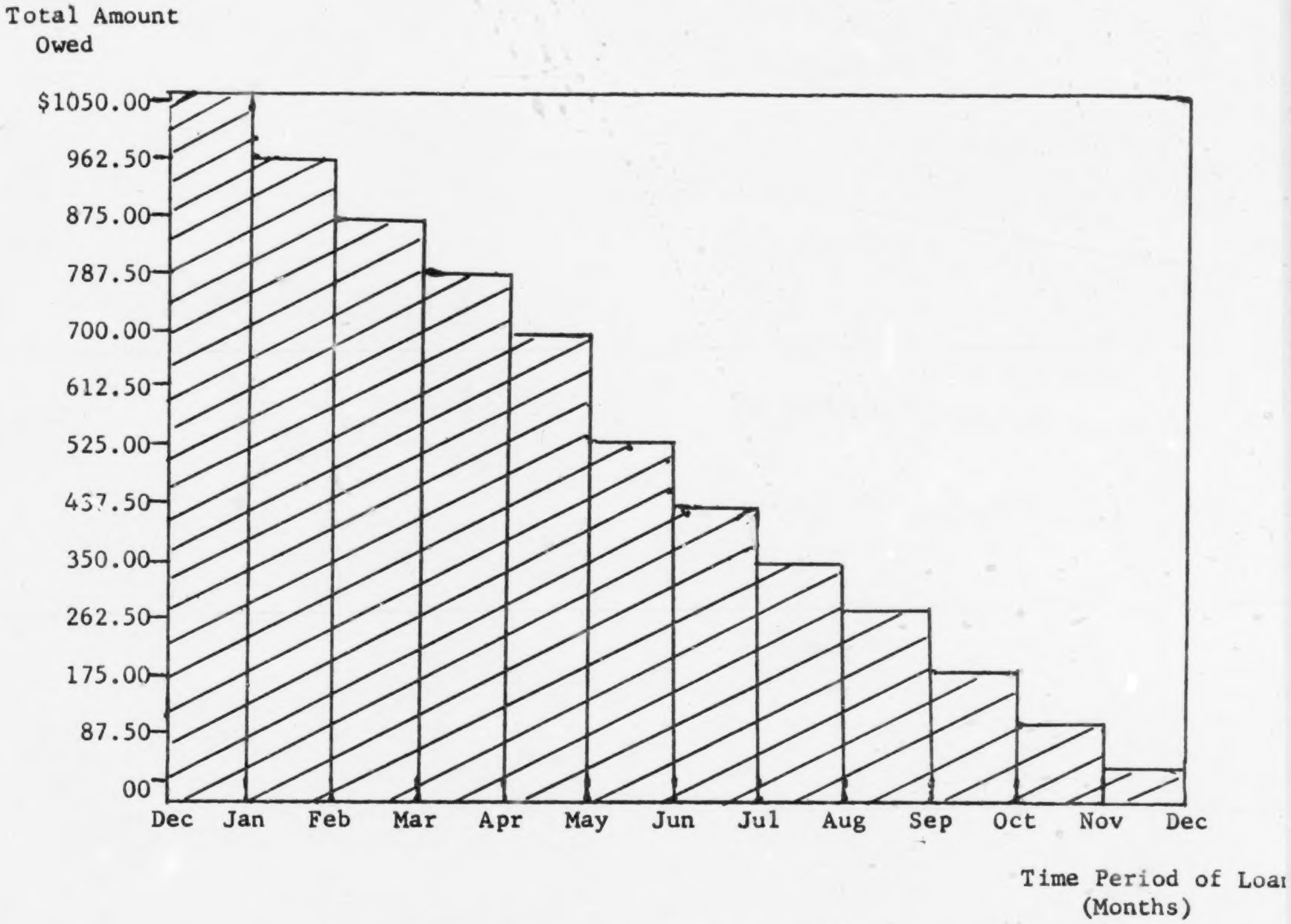
Loan $1000 for 12 months.

Interest payments, 5% for 1 year = amount of money borrowed times the interest rate,
= $1000 x 5% = $50

Total to be repaid = principal = interest by the end of 1 year,
= $1000 = $50 = $1050

Monthly payments = $1050/12 = $87.50

Are you paying 5% interest on this loan? To answer this question you need to first ask: How much money has been borrowed and for how long?



The Total Amount Owed For Each Month of the Loan Period

FIGURE I

At the beginning of the year, you owe $1050. Each month you reduce the amount owed by $87.50. Now, answer these questions:

(a) After 12 months, how much do you owe?
(b) After 6 months, how much do you owe?
(c) Have you borrowed $1050 for 12 months?
(d) On what sum are you paying the 5% interest?

After 12 months you owe nothing. After 6 months, you owe half of the original amount, namely $525. You did NOT borrow $1050 for 12 months--you borrowed it for 1 month, then you borrowed $962.50 for 1 month, then $875 for 1 month, and so on, as the diagram shows. You borrowed $1050 for only one month (and a smaller sum for each succeeding month), but you have paid 5% on $1000 for the whole year. Over the period of a year, on the average, the amount actually borrowed is $525. And interest payment of $50 for borrowing an average of $525 for a year is a true interest rate of about 10 per cent--double the rate quoted by the lender.

Installment buying, a form of borrowing widely practiced in our society, is a convenient but expensive way to get credit. Again, there are occasions when it is difficult to tell what the true annual rate of interest is. Even when it is simple to make the calculation, many people do not bother. For example, many department stores will permit customers to pay by installments provided they agree to pay 1½ per cent per month on the unpaid balance. While 1½ per cent per month doesn't sound like much, multiplied by 12 it figures out to 18 per cent per year.

In other cases of installment buying, it is much more difficult to arrive at the true interest rate because of the way that payments are quoted. In such cases it makes sense to shop for credit, just as you would shop for any other major purchase. If you want to make comparisons, there is a formula you can use to figure interest rates for all installment loans. We include it here for your own information; you do not have to memorize it, but you might like to make a note of it in case it comes in handy some day.

The formula for figuring the true interest rate for installment credit is:

$$i = \frac{Cx100}{P} x \frac{2M}{(N=1)}$$

in which i = true interest rate (as a percent per year)

C = total interest payments (total payment minus principal)

P = principal (amount borrowed)

M = number of payments per year

N = total number of installment payments

This is the same interest rate formula with an extra multiplier $\left(\frac{2M}{N+1}\right)$ to adjust for the fact that the loan is paid back in installments.

Here's an example of how to "plug in" numbers in the formula.

Suppose that you borrow $1000 for a period of 19 months. The "carrying charge," you are told, is $200, so that the total to be paid back is $1000 + $200 = $1200.

$$i = \frac{Cx100}{P} x \frac{2xM}{(N+1)}$$

where C = total interest payments = $200 (the "carrying charge")

M = number of payments per year = 12 (i.e. monthly payments)

P = principal = $1000

N = total number of payments = 19

$$i = \frac{2 \times 12 \times 200 \times 100}{1000 \times 20} = 24\% \text{ per year}$$

$$i = \frac{200 \times 100}{1000} \times \frac{2 \times 12}{(19+1)} \times \frac{20000}{1000} \times \frac{24}{20} = 24\% \text{ per year}$$

OPTIONAL PROBLEMS:

Figure out the interest rates for each of the following examples. Which loan has the highest true interest rate?

Loan Principal (P)	Total Payments	Period of Loan (N)	Monthly Payments
1) \$1000	\$ 1043.40	12 months	\$ 86.95
2) \$ 800	819.99	9 months	\$ 91.11
3) \$1200	1279.95	15 months	\$ 85.43

1) Let's calculate the true rate for the \$100 loan, using the formula:

$$i = \frac{C \times 100}{P} \times \frac{2M}{(N+1)}$$

Total interest payments (C) = \$1043.40 - \$1000 = \$ 43.40

Then the true interest rate is:

$$\frac{C \times 100}{P} \times \frac{2M}{(N+1)} \times \frac{43.40 \times 100}{1000} \times \frac{24}{13} = \frac{104.16}{13} = 8\% \text{ per year}$$

Now figure the other two:

2) Total interest payments (C) = \$819.99 - \$800 = \$20 (to the nearest whole dollar)

i = ____________________ = ______________% per year

3) Total interest payment (C) = (to the nearest whole dollar)

i = ____________________ = ______________% per year

4) The loan with the highest true interest rate has monthly payments of

________________________.

5) The loan with the lowest true interest rate has monthly payments of

____________________.

6) Determine the true interest rate on two different car loans held by students in the class using the formula given above:

$$i = \frac{C \times 100}{P} \times \frac{2M}{(N+1)}$$

Student Loan #1:

Student Loan #2:

LESSON 3

UNIT I

PROGRAM ON
PURCHASING POWER: INCOME, WEALTH, & CREDIT

Introduction

The poet Byron once wrote, "Ready money is Aladdin's lamp." With the money in your fist, you can buy anything. And at the time when Byron lived, 150 years ago, the reverse was also usually true--if you didn't have the money, too bad; no sale.

These days, things are different. What economists call "Purchasing Power" does not depend simply on how much we can, for example, buy many things without ready money. To understand what goes on in our society, we have to look more carefully at purchasing power in modern America. This program is a beginning of such an examination. When you're through with it, you should be able to:

1. Define purchasing power.

2. Identify examples of the three sources of purchasing power.

3. Identify examples of the different ways in which we derive income and thus build up purchasing power.

FRAME 1

In our society, almost everything is bought with and sold for money. We can satisfy our wants by an exchange of money for the goods and/or services desired.

But does this mean that we can buy nothing unless we have the money (either cash or check) to pay for it?

_____ Yes

_____ No

No

FRAME 2

For almost all major wants we are continually being urged by advertisers to "get it now and pay later" by using

________________________.

Credit

"charge accounts" or "credit cards" are acceptable answers. However, a credit card or charge account are just other forms of credit

FRAME 3

Although money is required to satisfy wants, our ability to satisfy wants does not depend simply on the amount of "cash" we have on hand. We have additional purchasing power for present spending if we can show that we can and will repay in the future.

For both individuals and businesses, purchasing power can come from either money or credit.

Suppose that you have $100 cash and no credit, while George has $50 cash and can also borrow $60 from the bank. Who has the greater purchasing power?

_____ Your

_____ George

George

His $50 + $60 = $110 which is greater than your $100.

FRAME 4

George's combination of cash and credit gives him a greater command over the use of money than you have. This command over the use of money is called purchasing ______________________.

power

FRAME 5

Purchasing power is ____________ over the use of _____________.

command over the use of money

FRAME 6

There are three sources of purchasing power:

income, wealth, and credit.

All three terms have precise meanings as used in economics, as you will see in a moment:

Income is money (or something having money value) which a person receives in return for providing productive services over a period of time.*

Wealth is a total stock of assets. (An asset is anything owned which has a value and which can be exchanged. Thus, an automobile is an asset; a house is an asset.)

Credit, as we will define it for this lesson, is simply the ability to borrow money.

* Examples of "something having money value" are rent-free quarters for the manager of an apartment house, reduced fares for airline employees, and discounts on purchases for store employees. All of these are income.

Indicate which of the following are income and which are wealth:

______________ (a) A factory worker's weekly wage check

______________ (b) A salesman's monthly commission

______________ (c) A cash balance in a savings account

(a) income

(b) income

(c) wealth

FRAME 7

Income is a flow of money over a period of time in return for your productive services.

Wealth is a collection of assets. Some assets may be in the form of money, others in a form close to money (for example, the balance in a savings account), and some may be difficult to exchange for money even though they have considerable value (for example, an office building).

Suppose you own $500 worth of General Motors stock. Is the stock income or wealth?

(pick one)

_____ (a) income

_____ (b) wealth

(b) wealth

The stock is an asset--something which you own, which has value, and which can be exchanged.

FRAME 8

Suppose you own a building and you rent it out as office space.

The rent you receive is...

(pick one)

_____ (a) income

_____ (b) wealth

(a) income

Providing office space is a productive service. Money received in return for a productive service is income.

FRAME 9

Suppose you sell this office building. The money you receive is ...

(pick one)

_____ (a) income

_____ (b) wealth

(b) wealth

You changed the form of an asset by exchanging your building for cash. But the cash still represents wealth.

FRAME 10

The money received from the sale of the office building is NOT income because ______________

____

____

(Your own words): It is not income because you didn't earn it by providing productive services over a period of time.

FRAME 11

Now that you have all this money from selling your office building, you might decide to put some of it into a savings account.

(a) The money you have deposited in the savings account is income/wealth. (pick one)

(b) The money you receive in interest from the bank is income/wealth. (pick one)

(a) wealth

It's an asset.

(b) income

Interest is money paid by the bank in return for a productive service (the use of your money) over a period of time.

FRAME 12

In your own words, complete the definition:

Wealth is ______________________________

____

____

Wealth is a total stock of assets.

FRAME 13

In your own words, complete the definition:

An asset is ____________________________

____

____

An asset is anything owned which has a value and which can be exchanged.

FRAME 14

If Mr. Smith uses his credit to buy, say, a refrigerator from a store, he has to sign a contract, a sort of IOU , in which he promises to pay a sum of money at certain intervals.

FRAME 14 (continued)

As far as the store is concerned, is this contract part of its wealth?

(pick one)

_____ (a) Yes

_____ (b) No

(a) Yes

FRAME 15

Mr. Smith owes money to the store. In return, he has given the store a promise to pay his debt. The evidence of a debt (such as an IOU or some other form of contract) is part of the wealth of the person or organization owning it.

The IOU or other promise to pay is part of the store's wealth because: ____________

____

____

it's an asset--something owned, which has value, and which can be exchanged.

(Did you know that many stores sell credit contracts to banks and other institutions?)

FRAME 16

Is the contract a part of Mr. Smith's wealth?

(pick one)

_____ (a) Yes

_____ (b) No

(b) No

FRAME 17

Is the ability to enter into this contract evidence of Mr. Smith's purchasing power?

(pick one)

_____ (a) Yes

_____ (b) No

(a) Yes

FRAME 18

Financial assets are assets that fall in any one of the following categories:

1. coins or cash
2. various types of bank or savings accounts
3. corporate stock certificates (since they are evidence of a financial interest in the company concerned.)
4. credit instruments (this includes all of the different kinds of promises to pay, such as IOU'S, time payment contracts, and bonds.)

Which of the following are financial assets?

_____ (a) A mortgage on a house.

_____ (b) Cash money

_____ (c) A checking account.

_____ (d) An Automobile

_____ (e) A note from a borrower promising to pay $500 plus interest on a certain date.

_____ (f) Ownership of 20 shares of a company's stock.

(a), (b), (c), (e), and (f).

(d) is an asset, but is not a financial asset.

FRAME 19

If you owned an automobile, could you convert it into a financial asset?

_____ (a) Yes

_____ (b) No

(a) Yes

FRAME 20

Name at least two forms of financial asset into which you could convert your automobile:

____

____

____

Possibilities include: (1) Cash, and (2) You may sell the car and use the cash from the sale to buy stocks or bonds.

FRAME 21

Now that we have had examples of each of three sources of purchasing power, see if you can name them:

1.____________________

2.____________________

3.____________________

1. Income; 2. Wealth; 3. Credit.

FRAME 22

Write in the source of purchasing power represented by each of the following:

_________________(a) Wages received by a bus-driver.

_________________(b) Charge account in a department store.

_________________(c) Diamond ring.

_________________(d) Loan from a bank.

(a) income; (b) credit; (c) wealth; (d) credit.

FRAME 23

Income, wealth, and credit are the sources of

____

____

purchasing power. (This is the only acceptable answer. If you got it wrong, please go back and change your answer.)

FRAME 24

Perhaps you noticed that income can take several forms. Economists categorize income according to the various kinds of productive services provided to earn the income:

WAGES AND SALARIES, INTEREST, PROFITS, AND RENT.

(a) Income from leasing property (land or real capital) is called__________________.

(b) Income from lending money is called __________________.

(c) Income from providing labor services is called _______________ and _______________________.

(a) rent

(b) interest

(c) wages or salary

FRAME 25

Income from labor services is called wages or salary.

If a person is paid by the hour or according to how much work he does (an hourly rate or "piece" rate) he is a wage earner. If he is paid a straight amount of money per week, month or year, regardless of the time he puts in or output he produces, he is a salaried earner.

A high-school teacher who has a year-long contract is a (a) ____________________ earner. A typist who earns $2.00 per hour is a (b) ____________________ earner.

(a) salaried

(b) wage

FRAME 26

A librarian has an income of $7000 a year. A foreman in a factory receives $10,000 in a year. Which one receives a salary?

_____ (a) The librarian

_____ (b) the foreman

_____ (c) Both

_____ (d) Neither

_____ (e) Can't Tell

(e) Can't tell from the information given.

The amount doesn't tell you. Whether an income is a wage or a salary depends upon the basis of payment. If a person receives the same income no matter how much time he puts in or how much he produces, he's receiving a salary. In the example given, you had no information on that point.

FRAME 27

Another form of income is business profit.

Profit is equal to the total receipts of a business minus the total cost of operations. It is what is left over after the owner has paid all the costs of running his business.

Important point: Profit is income received from risking assets (wealth) by investing in the business.

The owner of a grocery store pays himself a salary for working full time in the store. What do we call this salary?

(check either, neither, or both)

_____ (a) income

_____ (b) profit

(a) income

It is not profit, since profit is income received from risking assets. It is labor income.

FRAME 28

The owner of the grocery store buys goods at one price and sells them for a higher price. Is the difference between the cost price and the selling price called profit?

(check one)

_____ (a) Yes

_____ (b) No

(b) No

The cost of the goods is only one part of the store-owner's cost of doing business. He also has to pay rent, insurance, and so on. Profit is equal to total receipts minus total costs.

FRAME 29

Which of the following represent profit?

_____ (a) Money received by a corporation from selling old machinery.

_____ (b) The interest Mr. Williams receives from money in his savings account.

_____ (c) Dividends received by Mrs. Smith for General Motors Stock she owns.

Only (c) represents profit.

As a stockholder, Mrs. Smith is a part owner of General Motors. The dividends she receives are her share of what is left over after the costs of running the company have been paid.

(a) is an example of changing the form of assets--from machinery to money. (b) is income received in return for providing a productive service (the use of money) to the bank.

UNIT I
LESSON NO. 3

PROGRAM
CRITERION TEST

1. In your own words, define "purchasing power."

____

____

2. Write in the source of purchasing power represented by each of the following:

__________(a) Gasoline credit card.

__________(b) Profits earned by a drug-store owner.

__________(c) Government bonds owned by a shoe-manufacturing corporation,

__________(d) Interest received by a person or a commercial bank on a loan.

__________(e) Loan granted by a bank to a home builder,

3. What type of income is represented by each of the following?

__________(a) $7000 a year paid to a librarian under annual contract

__________(b) Money remaining from total receipts after store-owner has paid all expenses.

__________(c) $5 paid by savings bank to customer who has $100 in his account.

__________(d) $4 per hour paid by bank to the janitor,

__________(e) Dividend paid to holder of corporate stock.

__________(f) Income from leasing property.

__________(g) Income from lending money.

__________(h) Rent-free apartment used by an apartment-house manager.

UNIT I
LESSON NO. 3

ANSWERS TO CRITERION TEST

1. (Your own words): Purchasing power is command over the use of money.

2. (a) credit

   (b) income

   (c) wealth (asset)

   (d) income (banks have income, too)

   (e) credit

3. (a) salary

   (b) profit

   (c) interest

   (d) wage

   (e) profit

   (f) rent

   (g) interest

   (h) wages or salary

LESSON 3

PROGRAM ON
CAPITAL AND INVESTMENT

We live in an economy based on want-satisfaction through specialization and we take it for granted that production of the things we need in life is growing at least as fast as the population is growing. But this process of improvement in economic well being--of economic growth--is a basic concern in economics. As a result, it is crucial to be able to measure the growth of the economy.

By now you know that growth in output depends on growth in resource productivity, and that to a great extent the productivity of resources depends on having capital (buildings, equipment, trained labor) available. To study economic growth, it is necessary to uncover the conditions which are favorable for capital accumulation. This requires measuring things like capital, investment and saving. All of these are familiar words. They are, however, carefully defined by the economist (since you cannot measure something until you are sure what you are measuring).

FRAME 1

We've already had a definition of capital:

> Any improvement of natural resources (human or non-human) or any man-made input used in the production of goods and services.

See if you can recall the three kinds of improvement which were considered to be capital:

1. ________________________________

____

2. ________________________________

____

3. ________________________________

____

1. all buildings, bridges, roads and other improvements of land and other natural resources.
2. equipment, tools
3. education, training and improvements of labor (this is called human capital. It is important, but not usually included in measurements of capital.)

FRAME 2

In addition to the three foregoing kinds of improvement, there is another kind of capital we haven't mentioned. It is inventory.

> Inventories are stockpiles of raw materials, semi-finished goods, and finished goods produced but not consumed during some specified period.

This definition fits in with the earlier ones if you think of inventories as being raw materials which have been "improved" by being assembled at some point, possibly passing through some or all of the stages of production, but which have not yet been delivered to the final user.

Which of the following are capital in the form of inventory:

_____ (a) Coal at steel plant.

_____ (b) Fenders at an auto assembly plant.

_____ (c) Toasters in a store stock room.

All three are capital; all have been produced and accumulated for further production or future sales.

FRAME 3

An important measure of the productive capacity of a company or an economy is the amount of capital in use (since this measures the means of satisfying wants). To measure growth in ability to produce it is necessary to know how much new capital has been produced--how much has been added to capital over some given period.

Adding to capital is known as investment.

If at the end of 1967 a company's capital (its plant, equipment, and inventory) is valued at $7.5 million and at the end of 1968 the capital is $8 million, investment during that period is $_____________

$8 million - $7.5 million = $5000,000

FRAME 4

True or False?

Investment is the purchase or creation of new capital during some period of time.

_____ (a) True

_____ (b) False

(a) True

FRAME 5

Investment is part of production during a particular time period; it is the capital goods output produced in the period.

This is not hard to see. For instance, if a company builds a new factory, raw materials, capital and labor are used in production to create the new capital (the factory). Quite plainly the new capital, the investment, is the output of production.

We make a more general statement about the relation of investment to production. For any time period, say a year, production creates either consumption goods and services or capital (investment goods).

This can be stated in a formula. For a particular time period,

Total production output = ______________+_______________

Total production output = output of consumer goods (or investment) + output of capital goods

FRAME 6

Creation of capital during a period of time

is called ______________________.

investment

FRAME 7

Capital is the result of production. Production uses resources. If we want to increase the amount of capital, there is a cost; the resources cannot be used to produce consumer goods.

(a) True or false?

The creation of capital is a form of

production. ____________________

(b) What is the alternative cost of the investment?

____

____

(a) True

(b) the consumer goods which could have been produced with the same inputs.

FRAME 8

In our money exchange economy, investment -- addition to capital -- requires the use of money or credit. Or, to say it another way, before you can invest, you must have ________________________ power.

purchasing

FRAME 9

True or False?

(a) Investment is the addition to capital during a certain period of time.

____

(b) Investment is measured over time (for example, so much per year.)

____

(c) The amount of capital is increased through investment.

____

(d) Capital is created through a production process.

____

(a) True

(b) True

Like all other forms of production, real investment has no meaning unless we say how much time is involved. If we say, "This factory produced two cars," we cannot say whether this is high or low production unless we know something about the time involved.

(c) True

(d) True

FRAME 10

To summarize:

(a) The improved resources which provide the means for satisfying wants are known as ________________

(b) Additions to capital over a given period are called _______________

(c) In our economy, before you can make additions to capital, you must have

____

(a) capital; (b) investment; (c) purchasing power

FRAME 11

And now we run into one of those problems of definition We have just examined what the economist means when he says "capital" and "investment." These words are also used in financial circles with broader meanings and unless you are careful to note who is talking, you can run into trouble. We will keep the meanings separate here by distinguishing between:

real capital - the economist's version, and

financial capital - financial assets, including money.

What kind of capital is a $50,000 bank account?

____

financial - it's a financial asset

FRAME 12

What kind of capital should we call 100 new automobiles waiting to be delivered by the manufacturer?

_____ (a) real

_____ (b) financial

real

The autos are capital in the form of inventory (not yet delivered to the final user.)

FRAME 13

Label the following as real capital or financial capital:

(a) A government bond is ________________

(b) A new factory building is ________________

(a) financial capital

(b) real capital -- an "improvement" of land.

FRAME 14

Investment, as we said before, is addition to capital.

Since there are two kinds of capital, it will be no surprise to find that there are two kinds of investment:

real investment and financial investment.

Investment which involves the purchase or creation of the factors of production is real/financial investment.
(pick one)

real investment (because it is concerned with real capital)

FRAME 15

If someone says that he is going to "invest in the stock market," he is talking about

___________________investment.

financial.

He is going to buy a financial asset, not a factor of production.

FRAME 16

Suppose a company creates a stockpile of raw materials. Is this real investment or financial investment?

_____ (a) real investment

_____ (b) financial investment

Give reason for your answer:

____

____

____

(a) real investment

It involves the purchase of one of the four kinds of real capital we have named, namely inventories.

FRAME 17

Remember that financial capital means financial assets -- money, bank accounts, stocks, bonds, IOU'S. They are assets because they are owned, they have a market price, and they can be exchanged.

We now have a succession of things and events which we can put together like "The House that Jack Built."

- This is the financial investment	- People and business firms exchange money for stocks, bonds, or IOU's
- Which was added to financial capital	- Increasing the amount of stocks, bonds, IOU's held by people
- Which provided purchasing power	- and the amount of money held by businesses
- Which was used for real investment	- Businesses exchange money for new plant, equipment, or inventories
- Which was added to real capital	- Increasing the amount of capital goods
- Which increased production of goods and services.	- And increasing production

Many people confuse the two kinds of capital and investment. As this shows, the two words are used in the same kind of way on both occasions. The true distinction is between what is "financial" and what is "real."

FRAME 18

Wealth is the stock of all assets -- all things which have a measurable exchange price.

Is financial capital part of wealth?

_____ (a) Yes

_____ (b) No

> (a) Yes
>
> Financial capital is the collection of financial assets. (Financial assets are money and things such as bank accounts, bonds, stocks.)

FRAME 19

Is real capital part of wealth?

_____ (a) Yes

_____ (b) No

> (a) Yes
>
> The improved human and non-human resources and the "improved" materials in inventory all have a value--a measureable market price.

FRAME 20

So far we've said that:

Wealth is the total stock of assets which have a market price.

Wealth includes both real capital (improved natural resources) and financial capital (financial assets).

Just to tie up this discussion of wealth, what is the third part?

____

____

Natural resources (before they are improved and thus turned into capital.) Total wealth = real capital + financial capital + natural resources.

UNIT I
LESSON NO. 3

PROGRAM
CRITERION TEST

In this program you have learned the relation between capital and investment, and you have learned the different meanings of capital and investment.

1. To see how well you have learned the differences, identify each of the following examples as either financial capital, real capital, financial investment, real investment, or none of these:

   a. ______________________ A 60-day bank note (an agreement to pay back a loan in 60 days).

   b. ______________________ The Jones family buys a new TV set.

   c. ______________________ The gold in Fort Knox.

   d. ______________________ Disneyland.

   e. ______________________ Sara Smith buys a U.S. Savings Bond.

   f. ______________________ Lumber in a local lumber yard.

   g. ______________________ A county purchases new road equipment.

   h. ______________________ A manufacturer converts an old warehouse into a factory.

2. A compnay had buildings valued at $2,000,000 at the beginning of the year and had buildings valued $3,000,000 at the end of the year. It did not sell any buildings during the year. What statement can you make about investment?

   ____

3. Real investment is part of:

   _____ (a) production in a particular year

   _____ (b) wealth

4. Investment is defined as ______________________________

   ____

UNIT I
LESSON NO. 3

ANSWERS TO CRITERION TEST

1. a. financial capital

   b. none

   c. financial capital

   d. real capital

   e. financial investment

   f. real capital

   g. real investment

   h. real investment in the conversion work, not in the purchase of the old warehouse

2. Investment in buildings was $1,000,000 that year.

3. (a), (b)

4. Additions to capital during a given time period or the purchase or creation of capital during a time period.

LESSON 3

PROGRAM ON SAVING

FRAME 1

Saving is not spending income.

Wow! Surprise! So what?

Well, it's more important than you might think. Saving is another of those words which is used with care in economics and once again, the man-in-the-street meaning isn't quite the same as the economist's.

When we talk about saving in economics, we mean current saving.

Current saving is that part of current income that is not spent on current consumption of goods and services.

Fill in the gaps in this equation:

__________ __________________ =

current income minus current consumption.

current saving

FRAME 2

Current saving = current income minus current consumption.

Economists assign symbols to these words to make a shorthand version:

Y = current income
S = current saving
C = current consumption

(They use Y for income because the letter I is used to mean investment later on.)

Using the three symbols, write the equation which defines current saving:

__________=__________-__________

S = Y - C

FRAME 3

S = Y - C

Suppose you have $500 in a savings account. Is this current saving?

_____ (a) Yes

_____ (b) No

No

FRAME 4

The money in a savings account is not part of current income and so, the way we have defined things, it cannot be what the economist calls saving (that is, current saving).

If the money in the account is not what the economist calls saving, what is it?

_____ (a) Real Capital

_____ (b) Wealth

(b) Wealth

($500 may not sound like the rich-rich-rich kind of wealth, but it's a financial asset and as such is part of wealth.)

FRAME 5

We have just distinguished between what the economist calls saving (that is, current saving) and what most people refer to as saving (that is, the accumulated store of assets in the form of money or bank deposits which is part of wealth).

Before we tell you why it's necessary to make this distinction, take a moment to make use of this new definition of saving:

Assume the information on the next page describes the financial condition of the Jones family for 1966. Identify as S, Y, C, or "none" the various items from the family budget:

(continued on the next page)

FRAME 5 (continued)

1.	_____	Total income of the family from Jan., 1966 to Dec. 31, 1966	$12,500
2.	_____	Transportation costs	800
3.	_____	Food, clothing, house rent	7,200
4.	_____	Increase in saving account balance between Jan. and Dec., 1966	2,000
5.	_____	Saving account balance, December 31, 1965	9,000
6.	_____	Entertainment, medical expenses	1,000
7.	_____	Purchase of government bonds under a payroll deduction plan	1,000
8.	_____	Increase in checking account balance at end of year	500

1. Y
2. C
3. C
4. S
5. none
6. C
7. S
8. S

FRAME 6

Notice that the answers to the last frame show that the Jones' family savings account at the end of 1965 (item 5) is not considered current saving for the period January-December, 1966. The current saving during the period was $2000. The $9000 already in the account at the start of the period was the accumulated saving which is part of wealth.

Of the following, which represents current saving:

_____ 1. Corporate stocks received and kept by the President of XYZ Corporation this year in a profit-sharing plan.

_____ 2. The corporate stocks owned by the Jones' family.

_____ 3. A $50 Christmas bonus paid all employees at the XYZ Corporation.

Only No. 1 is saving.

Number 3 is income, and No. 2 is part of the accumulated saving of the Jones' family.

FRAME 7

Perhaps it has occurred to you that when we talk about "current income" or "current consumption", or "current spending", we have to say what period of time we mean by "current." In the case of the Jones family budget, "current" means the year ____________________.

1966

FRAME 8

We measure production in amounts of output produced because production takes time. You may recall that investment was measured as "additions to capital during a period of time".

Should income be measured as an amount earned over time?

_____ (a) Yes

_____ (b) No

(a) Yes

We say that a man earns so much per week, or so much per year, and so on.

FRAME 9

Does consumption spending occur over time? Why?

_____ (a) Yes

_____ (b) No

____

____

(a) Yes

It involves an amount over a period--
$30 a week on groceries, $150 per month
for rent, and so on.

FRAME 10

When the economist talks about saving (that is, current saving), does it occur overtime? Why?

_____ (a) Yes

_____ (b) No

____

____

(a) Yes

Saving (as defined by the economist) is "not spending current income", and current income is earned over time.

FRAME 11

Let's summarize. Answer the following questions:

(a) current income = _____________+______________

(b) or Y = ________+_________

(c) current saving is defined as not ____________

____

(d) This means that current income is either spent on consumption or it is ______________________.

(e) If you earn $25.00 per week and your Dad tells you you can keep half of what you earn if you bank $8.00 a week and give him $4.50 a week to help pay for your clothing what is your current saving?

(1) $8.00 _____

(2) $8.00 per week _____

(continued on the next page)

FRAME 11 (continued)

(3) $4.50 ____

(4) $4.50 per week ____

(5) $12.50 per week ____

(6) the balance in your saving account. ____

(a) current consumption spending and current saving

(b) C & S

(c) spending current income

(d) saved

(e) (2) $8.00 per week. You must always measure saving during a period of time.

FRAME 12

Now we are ready to explain why all of the fuss about defining current saving. The reason is that the amount of current saving effects the amount of current investment that occurrs in the same time period. Let's see how.

See if you can recall the answer to this question:

In a money exchange economy, what must you have to invest in capital goods?

____

purchasing power

FRAME 13

Purchasing Power, we decided, can come from

________________, ____________, or

____

income, wealth, or credit

FRAME 14

What part of current income is available for real investment ?

_____ (a) all of it

_____ (b) the part used in current consumption

_____ (c) current saving

current saving

FRAME 15

Assuming that you don't put your current saving under the mattress, what happens to it? What do almost all people do with their current saving?

____

____

____

They bank it--in a savings account or a checking account--or they buy stock or bonds.

FRAME 16

Most people invest their current saving in stocks or bonds if they do not deposit it in a saving or checking account. This is real/financial.
(pick one)

financial

FRAME 18

Now that your money is safe in the bank or invested in stocks or bonds, you can breathe a sigh of relief. It's safely tucked away making more money for you. And it's back in circulation for someone else to use. In fact, a business can use it to purchase real capital.

In this case it becomes the ______________

______________ for making a real/financial (pick one) investment.

purchasing power

real

FRAME 19

The real investment enables the business to

__________________________________.

increase production.

FRAME 20

A statement which the careful student often makes:

> O.K., so you turn saving (economist's definition) into increased production, but that isn't what happens with my saving. I stick it in the bank and there it sets.

Reply:

> But it doesn't. Banks base the power to lend money on accounts like yours. By putting money in the bank, you enable the bank to lend money to others who wish to make additions to real capital.

FRAME 21

So far, we have said that current saving can finance real investment. This happens when people invest their saving or deposit it in their bank account.

But savings and real investment are related in still another way. If people save part of their income, then there are resources available for producing capital goods. Remember from the earlier program that the alternate cost of producing capital goods is that consumer goods could have been produced with the same results. If everyone spent all of their income on consumption goods--food, clothing, shelter--all of the resources would be used up producing consumption goods. There would be no resources left to produce real capital.

(a) Not spending current income on consumer goods and services is ______________________________.

(b) True or False?

If there is current saving, all available resources must be used to produce consumer goods.

____

(c) If people save part of current income, the resources are available for

______________________________________.

(a) current saving

(b) False

(c) real investment (or producing real capital)

FRAME 22

Y = S + C

(a) The part of current income that may help to increase production in the future is

________________________.

(b) The part of income that helps to pay for current production is

__________________________________.

(a) saving

(b) consumption spending

UNIT I
LESSON NO. 3

PROGRAM
CRITERION TEST

1. Which of the following are current savings?

_____ (a) Sally William's weeks babysitting money to buy a car.

_____ (b) John Marshall puts half of his earnings in the savings account to pay for his college tuition when he graduates from high school in two years.

_____ (c) The balance in Mr. Green's savings account.

_____ (d) Your father buys a government savings bond using part of his pay check each month.

_____ (e) Your family buys some corporate stock with money from its savings account.

2. Which of the above examples represents a financial investment?

____

3. Check the correct statement about current saving:

_____ (a) current saving is part of current income

_____ (b) current savings is not spending current income

_____ (c) current saving becomes wealth when it is invested

_____ (d) people use current saving for financial investment

_____ (e) S = C + Y

_____ (f) current saving is the only source of purchasing power for real investment.

4. State two ways in which saving and real investment are related:

(a) ____

(b) ____

5. BONUS QUESTION:

Can you think of an example when a person saves through real investment?

____

____

UNIT I
LESSON NO. 3

ANSWERS TO CRITERION TEST

1. (b), (d)

2. (d), (e)

3. (a), (b), (c), (d)

4. (a) saving is the part of current income available to spend on real investment

   (b) When people save, part of their income resources are available to produce real capital.

5. A farmer uses current income to buy a tractor, or a boy buying a lawn mower from earning money mowing lawns.

LESSON 3
CRITERION TEST
(on items for which there are no programs)

Exchange means to (1) ________________ one (2) ________________

for another. When money is not used, exchange is called (3)

________________ing. The need for exchange arises because of

(4) ________________ production.

5. In ancient times in Egypt and the city states of Mesopotania, wheat was used as money. Describe as fully as possible the characteristics of wheat which made it serve well the three functions of money.

6. Around 700 B.C. the Greeks began to use imprinted coins. What advantage did coins have over wheat?

7. What functions does U.S. money serve?

____

____

____

____

Check any of the following which are not part of the U.S. money supply.

8. _____ U.S. Federal Reserve Note
9. _____ $20 gold coin
10. _____ U.S. Government Bond
11. _____ Diner's Club Credit Card
12. _____ a half-dollar
13. _____ a demand deposit of $200

14. Describe the similarities and differences in function between paper currency and a credit card from a commercial bank with respect to serving as:

    a. a medium of exchange

    b. a store of value

    c. a unit of account

15. What are the differences in function between commercial banks and savings and loan associations?

16. Describe the financial advantages a corporation has over an unincorporated business.

17. If we ever get to the point of specialization in exchange such that this does become the cashless society,

    a. what purpose would dollars serve?

    b. Will there be money? If so, what would it probably be and which of the three functions of money would it serve?

UNIT I
LESSON NO. 3

LESSON 3

CRITERION TEST ANSWERS

1. trade (exchange)

2. asset

3. barter

4. specialized

5. Wheat could be divided into standard units of measure and thus serve as a unit of account. All assets could be valued in terms of units of wheat and stored wheat was a kind of checking account against which you could draw units to use for purchasing another asset, thus wheat functioned as a medium of exchange. Finally, wheat stores easily and lasts a long time, consequently, it also functioned as a store of value.

6. Coins are more portable and more easily stored than wheat.

7. Unit of account
   Medium of exchange
   Store of value

8. ____ 9. ✓ 10. ✓ 11. ✓ 12. ____ 13. ____

14. a. Both paper currency and credit cards function as a medium of exchange but paper currency is more widely accepted than credit cards.

    b. Paper currency is a store of value, it is an asset which can be traded for another asset. A credit card is not an asset, it represents a store of credit, i.e., the ability to borrow money.

    c. Paper currency denominations are expressed in terms of the unit of account or multiples thereof. A credit card is not defined in terms of units.

15. Commercial banks provide all financial services except those of 1) pawn shops, and 2) investment banks, i.e., banks which provide financial services to large public oorporations. Commercial banks hold savings and demand deposits, and make loans of all types, both to individuals and business firms. A savings and loan association holds only savings deposits and can make loans only against real property.

16. A corporation can raise money by selling stock (certificates of ownership) to the public. A person can invest in a corporation and his liability for the debts of the corporation are limited to the money he paid for the stock. Neither of these things is true of a unincorporated business. An unincorporated business can only raise money through borrowing, and its owners are liable for all the debts of the business.

17. a. As a unit of account and for small transactions.

    b. There will probably be money, in small denominations, which will serve all three functions, but almost all exchanges will be carried out by altering the balances in the accounts of sellers and buyers, i.e., if, an asset costs $100, the sellers' account will be credited $100 and the buyer's account will be debited $100.

LESSON 4

UNIT I
EXERCISE 1

THE RELATION BETWEEN CURRENT SAVING & REAL INVESTMENT

In the table below, Column I lists typical activities in the U.S. economy and in the two Indian economies studied in this lesson. In Column II state whether you think that the activity represents current savings, real investment, or both current saving and real investment. Using the definitions of current saving and real investment given in Lesson 3, justify your decision in Column III.

I Economic Activity	II S, I, or both S & I	III Explanation
1. A family in the U.S. buys a government bond each month out of the father's pay check.		
2. A Kiowa woman prepares buffalo hides and sews them into a tipi.		
3. A Tsimshian chief uses olachen oil to purchase a new canoe from a Haida canoemaker.		
4. A local foundry in the U.S. uses profits to purchase a new machine.		
5. The same foundry borrows money from a bank to buy the new machine.		

LESSON 4

UNIT I

EXERCISE 2

ECONOMIC INSTITUTIONS

Column I below lists different social institutions in the U.S. For each example which you think is an economic institution (a major function of the institution is one or more of the primary economizing activities or basic allocation choices). In Column II list the activity (ies) or basic choice (s) with which the institution is involved.

I Social Institution	II Major type (s) economic activity or decision it carries out
1. A local church	
2. A supermarket	
3. A small family farm	
4. The American Legion	
5. The Democratic Party	

The following questions help you to analyze the important differences in the function of real capital and the methods used to create new real capital in primitive societies and industrial societies. Use the preceeding examples, the readings for this lesson and what you have learned in Lessons 2 & 3 to answer the following questions:

6. What are the major kinds of real capital produced or acquired in each of the Indian Societies studied in this lesson? How did they acquire them?

Major real capital goods　　　How were these goods obtained?

(a) Tsimshian Indians:

(b) Kiowa Indians:

7. In Lesson 3, we defined current saving as 'not spending current income" or S=Y-C. Using question two above, state a definition of saving which is a more accurate description of current saving in a primitive society.

8. Why were these societies more limited than the U.S. economy in their ability to undertake the rapid increase in real capital?

9. What can you say about the relation between real investment and current saving:

   (a) in a primitive society?

   (b) in the U.S.?

UNIT I
LESSON NO. 4

LESSON
CRITERION TEST

1. Which of the following activities described below is more like financial investment in the U.S.? (check the answer and explain why this is a financial investment):

_____ a. Kiowa men acquire new horses in a raiding party.

_____ b. Tsimshian craftsman builds a new canoe.

_____ c. Kiowa Indians go on a buffalo hunt.

_____ d. Kiowa men trade for horses with each other.

2. Check which of the following are economic institutions. Which of the five economic activities are they mainly involved with?

	Activities:
_____ a. Credit union	______________________
_____ b. A restaurant	______________________
_____ c. Congress of the U.S.	______________________
_____ d. Hospitals	______________________

CRITERION TEST (continued)

3. The readings in this lesson have given many examples of the effect on economic decisions and activities of CUSTOM, COMMAND, and MARKET FORCES. In Column III below give an illustration from the readings of the combination of Columns I and II.

I Type of Economic Decision	II Name of Action	III Your Example
EXAMPLE: What to produce	command	Russia: the major long-run decisions about "leading links" are determined by the political leaders in the 5-year plan.
1. What to produce	market	
2. How to produce	command	
3. How to produce	custom	
4. For whom to produce	custom	
5. How much to produce	custom	

CRITERION TEST (continued)

4. Read the essay on Russian production and the essay on "The Boston Ice Trade." Using the model of an economy, developed in this lesson, compare the differences between the function of the capitalist, Frederic Tuder, and the Russian plant manager.

5. What are the major differences in economic organization between the Tsimshian Indians and the Kiowa's? For each difference offer a possible explanation (hypothesis) about the reason for the differences.

UNIT I
LESSON NO. 4 ANSWERS TO CRITERION TEST

1. d. Horse trading was simply a transfer of assets usually for speculative prupose, which is similar to buying and selling shares of stock.

2. a. savings, investment
   b. production, consumption, exchange
   c. all five activities
   d. production, consumption

3.

I	II	III
1. What	Market	The Tsimshian produced olachen grease as a trade good in response to market demand. The Kiowa produced horses to trade in Mexico for flour, weapons, and ornaments. Frederic Tudor, the Boston iceman, created a market for ice and then produced ice to satisfy that market demand.
2. How	Command	In Russia the Plan often determines what resources and what capital goods will be used in production. This together with the Manager's control over labor is an example of command decisions of how to produce. The horse raiding expeditions of the Kiowa.
3. How	Custom	The Tsimshian followed custom in fishing and hunting.
4. For whom	Custom	The Tsimshian distributed production among the lineage according to custom, potlach distributions to other lineages is another example. King Harsha's Great Almsgiving was distribution by custom.
5. How much	Custom	The Tsimshian and Kiowa produced enough food to satisfy their customary needs then they stopped.

4. 5-4-3 Model:

Five Activities

1. Production
2. Exchange
3. Saving
4. Investment
5. Consumption

Four Decisions

1. What
2. How
3. How Much
4. For Whom

Three Forms of Organization

1. Custom
2. Command
3. Market

(See chart on following page)

ANSWERS TO CRITERION TEST (continued)
(Question 4 continued)

	RUSSIAN MANAGER	YANKEE TRADER
Five Activities:	The plant manager is primarily concerned with production, and with some exchanges. Plant activities may result in both investment (producing new capital equipment) or saving (accumulating inventories of raw materials or finished goods). Consumption of the product is no concern of the plant manager.	The Yankee trader and his employees were directly involved in all five activities. They produced and exchanged ice, other people's savings were borrowed ($250,000 at least) to invest in the business and the comsumption of ice (demand) was of vital concern to them. Everything possible was done to give the consumer satisfaction from consuming the ice.
Four Decisions:	The Economic Plan, made by the planning bureau, makes basic decisions on exchanges, investment, and saving. Because the plan also sets the quality, and price of goods and services, it has a strong influence on consumption. Only production decisions are left to the plant manager. Therefore, what, how much, and for whom decisions are made by the Plan. How decisions, given an allotment of resources, human and non-human capitàl, are left to the plant manager. In Russia, economic growth occurs because saving and investment (capital accumulation) is planned.	The Yankee trader made all of the decisions as a result of market bargaining. He decided to produce ice and how to produce it. The services he rendered to consumers and the price he charged determined how much ice he could produce and sell and who was able to buy it (for whom). Frederic Tudor's activities are a good example of how economic growth occurs in a market economy. A demand for something is first discovered or created and then production is organized to satisfy it.
Three Forms of Organization:	The Plant manager works primarily within a command structure which is determined by the plan. He buys labor on a free market and his pushers operate in an illegal market. All economic systems are, of course, shaped by tradition and, no doubt, the Russian plant manager accomodates himself to tea breaks, and vodka parties.	The Yankee trader operated very largely in a market system. He too had to organize production in accordance with custom (obviously the customs of the sea gave him a bad time), but the main place he was controlled by custom was in his marketing problems. He had to create new consumption customs in order to succeed. During times of war he had to shut down his business by government command and this vitally affected him.

CRITERION TEST ANSWERS (Continued)

5. Both tribes based their economic organization largely on custom. Neither economy was marked by any significant economic growth so one can say that customary economies have limited growth potential while command and market economies have high growth potentials. Within their customary framework, the two economies had significant differences largely arising from the fact that the Tsimshians were sedentary (they stayed in one or two places all year) while the Kiowa ranged over a large area.

   Staying in one place allowed the Tsimshians to accumulate more capital and thus production was more round-about than with the Kiowa. Saving and investment, in both societies, usually consisted in saving food and investing it by supporting a worker who produced a capital good (a house, canoe, or weapon). The Kiowa made investments by means of the horse raiding party while the Tsimshians accumulated very little capital from warfare.

   Consumption in both societies was based upon social status but in both, there was a high degree of equality in the consumption of necessary food and clothing.

LESSON 5

UNIT I
EXERCISE 1

THE CIRCULAR FLOW DIAGRAM AS A MODEL OF AN ECONOMY

1. Draw and completely label a circular flow diagram for the U.S. economy. Compare your diagram with the one in Chapter 5 of the text and, if necessary, correct your diagram to make it complete.

2. The diagram is a model of our economy. As such, it shows important relationships between economic institutions.

   a) State as many of these relationships between institutions as you can see shown in the diagram:

   b) List any other relationships you see shown in the diagram:

3. A model simplifies reality in order to emphasize the relationships of interest to the model builder. What economic activities and institutions are not included in the model:

4. What aspect of production specialization is shown? What aspects of production specialization are not shown by the diagram?

LESSON 5

UNIT I
EXERCISE NO. 2

PRODUCT AND FACTOR MARKETS

A product market is any market in which produced goods or services are sold. This includes sales of products (such as manufacturers, mining companies or farms) to wholesale distributers; and it includes sale of products by wholesalers to retail outlets (stores, restaurants). It even includes the sale of semi-furnished goods such as sheet steel

A factor market is any market in which services of factors of production (human and non-human, natural and capital resources) are purchased for use in production--hiring of labor, rental or purchase of land or buildings, leasing or purchase of machinery.

1. Check which of the following occur in a factor market?

_____ a) a machinist is hired by an electronics company

_____ b) you eat dinner at a restaurant

_____ c) you buy a new car from a local dealer

_____ d) a retail store owner rents store space

_____ e) you apply for a charge account at a department store

_____ f) a department store signs a new contract over ways and working conditions for its employees with the retail clerk's union

2. Check the following exchanges which occur in a product market:

_____ a) a shipping company hires a sailor

_____ b) Carnation Milk buys milk from a milk cooperative

_____ c) a bank leases a computer from a computer manufacturer

_____ d) one farmer sells his farm land to another farmer

_____ e) a chain grocery store buys canned hams from a meat-packing company

_____ f) a dentist fills a patient's tooth

LESSON 5

UNIT I
EXERCISE 3

MEASURING ECONOMIC ACTIVITY, THE DIFFERENCES BETWEEN "STOCKS" AND FLOWS"

The circular flow diagram describes the operation of the whole economy--the overall effect of production, distribution and exchange in creating a continuous flow of income and output.

In order to study the effectiveness of an economy in creating income, output and wealth, it is necessary to measure how much income output and wealth there is. The circular flow diagram should help you to understand the difference between income and wealth and how these two kinds of quantities are measured.

Income and output are the result of economic activity--of production. They can be measured two ways: a) as a flow or rate or activity (the income or output produced per period of time), or b) as a stock or amount of output (wealth) in existence at some one point in time.

1. Which does the circular flow diagram show: (check one)

_____ a) output as a rate

_____ b) output as a stock

2. Gross national product is the market value of the final goods and services produced by the economy during a period of time--say three months. Is GNP: (check one)

_____ a) a rate or flow

_____ b) a stock

3. National income is the sum of all income earned in a given period of time for providing productive services--again three months. Is National income:

_____ a) a rate

_____ b) a stock

4. The National wealth is the market value of all assets in existence at a particular time. Is wealth: (check one)

_____ a) a rate

_____ b) a stock

5. In general, income and production figures measure rates of economic activity over time. They do not measure what output is in existence.

(continued on the next page)

QUESTION 5 (continued)

Check which of the following are flows and describe what activity they measure (production, distribution, consumption, saving, investment):

_____ a) total assets of a corporation ____________________

_____ b) labor costs of a company during January, 1966

____

_____ c) department store sales in January, 1966 ____________________

_____ d) numbers of cars in the U.S.A. in January 3, 1966

____

_____ e) rent received by an apartment-house owner in July, 1966

____

_____ f) supply of paper money in the U.S. on September 1, 1967

____

_____ g) deposits held by the Bank of America in June 28, 1966

____

6. What is the relation between the flow of income earned by a family during, say 1966, and the stock of wealth owned by the family at the end of 1966?

LESSON 5

PROGRAM ON "SYSTEMS"

FRAME 1

The word "systems" is used a lot these days. We use it, for example, in connection with missiles and other aircraft, highways, and computers. It is a word that is also used in economics. This program begins by defining the word. When you have completed the program you will be able to do the following:

- List the three conditions that define what a system is.
- Identify different levels of systems and sub-systems in economics.
- Distinguish between macro-economics and micro-economics.

FRAME 2

Definition:

A system is an orderly arrangement of parts into a whole to perform some specific function

A radio set is a system since it consists of:

(1) parts, arranged. . .

(2) into a whole. . .

(3) for a specific function.

Is an automobile a system?

(check one)

_____ (a) Yes

_____ (b) No

Yes

FRAME 3

The automobile meets the three conditions:

(1) an orderly arrangement of parts . . .
(engine, chassis, body, etc.)

(2) into a whole. . .
(the automobile)

(3) to perform a specific function . . .
(transportation of people and things over roads)

Is the Los Angeles freeway system a system as we have defined it?

_____ (a) Yes

_____ (b) No

Yes

FRAME 4

The three conditions met by the freeway system are:

(1) an orderly arrangement of parts . . .
(the individual, interconnecting freeways)

(2) into a whole . . .
(the freeways taken together)

(3) . . . .
(more efficient traffic flow)

(YOU write in the third condition)

(3) to perform a specific function.

(Note to those who have had experiences that make them wonder about the efficiency of the Los Angeles freeway system: Everything is relative! We said more efficient. If the freeways are bad, think what it would be like if you had to fight your way across town using only the ordinary city streets. The freeway system has a specific function: To move so many thousands of vehicles per hour into and out of the various areas of the city. The fact that the system cannot handle the demands made upon it during the rush hours or that a single-rear-end collision can foul up the whole sections of freeway doesn't change the function of the system.)

FRAME 5

An automobile is a system; its function, transportation.

Suppose an auto dealer has a spares department that contains all the parts needed to build a car...

Do the contents of this spares department represent a transportation system?

_____ (a) Yes

_____ (b) No

No

FRAME 6

The definition of system contains three conditions which must be met. One condition is:

to perform a specific function.

The spare parts department contains all the elements needed for a transportation system, but they are not organized into a whole to perform the specific function we have named--transportation.

But does the spares department represent a system of another kind, one with a different function? Suppose we say that the function of the department is to provide accessories and parts needed to keep customers' automobiles running.

Is the spares department a system?

Yes.

The department is an "orderly arrangement of parts" --not.simply the inventory of auto parts. The auto parts are arranged in some order, but also there are parts of the department such as management, bookkeeping, shipping and receiving, shelves, a building, and so on. All the elements forming a whole to perform a specific function -- easy availability of auto parts.

FRAME 7

An advertising agency hires 200 interviewers to conduct an opinion poll among housewives about the new miracle detergent, "Boom." After collecting together the replies of 6000 housewives to a prepared set of questions, the agency reports to the manufacturer, "Four out of five housewives surveyed prefer "Boom" over all other leading detergents."

(a) Put a check against the conditions that are met by this opinion poll:

_____ an orderly arrangement of parts

_____ into a whole

_____ to perform a specific function

(b) The opinion poll (is/is not) a system.
(circle one)

(a) _____ an orderly arrangement of parts

6000 housewives were all asked the same question; their answers were recorded by the interviewers.

_____ into a whole

The answers were combined into a single finding (Four out of five prefer "Boom")

_____ to perform a specific function

The report to the manufacturers on reactions to their new product.

(b) This IS a system. It meets all of the conditions.

FRAME 8

So far, we have identified as systems:

(a) a radio set
(b) an automobile
(c) a freeway network
(d) an auto dealer's spares department
(e) an opinion poll

The first four are systems made up of collections of parts that are physical objects.

True or false? The collection of parts that makes up the opinion poll system consists of activities rather than physical objects.

_____ (a) True _____ (b) False

True.

There are some physical objects--the people, the questionnaire forms, and so on. But they all contribute to activities.

FRAME 9

True or false? The collection of parts in a system can be either or both physical objects or activities.

_____ (a) True

_____ (b) False

True

FRAME 10

This course is a system.

Which of the following are included among its "collection of parts?"

_____ (a) physical objects

_____ (b) activities

Both (a) and (b)

FRAME 11

A teacher's grading procedure fulfills the three conditions necessary for a system. Write in the three conditions:

1. ________________________________ (Many test scores are recorded.)

2. ________________________________ (The individual scores are averaged to determine the final grade.)

3. ________________________________ (To report to the student and his parents on his progress in school.)

1. Orderly arrangement of parts
2. Into a whole
3. to perform a specific function.

FRAME 12

The activities and physical objects which can be included in a system may also be systems themselves. These systems within a system are called sub-systems.

An automobile is a system with the function of transportation . . .

Name at least two sub-systems of the automobile:

....

....

....

The choice is yours. The sub-systems include: the fuel system, ignition system, the steering system, braking system, lighting system, and so on.

FRAME 13

Some sub-systems can be further divided into what might be called sub-sub-systems.

For example, the lighting system is really a sub-system of a car and it has the major function of illumination. Within this lighting sub-system is a sub-sub-system for signaling.

Your school is a sub-system within what system:

(a) ....

Name at least two sub-sub-systems within the school sub-system.

(b) ....

(a) Several possible answers exist:

The local school district
The state school system
The U.S. education system, and so on.

(b) Your answer might include:

This course or some other course
Disciplinary system (such as the group of math courses you take in high school)
Janitorial or cafeteria service
The bell or buzzer system that signals classrooms. And so on.

FRAME 14

All of these systems, sub-systems, and sub-sub-systems have functions that are:

_____ (a) the same

_____ (b) different

(b) different

FRAME 15

Each part in a system has some relationship to at least one other part. They work together in helping the system to perform its function.

What happens if one part of the system fails to do its job?

_____ (a) It makes no difference. Other parts of the system keep on working.

_____ (b) The system fails, either completely or partially, until the part is restored.

(b) Each part of the system is related to others. When a part fails, the system can no longer operate as it is meant to operate.

If, for example, the fuel sub-system fails on a car, the entire transportation system (the auto, that is) also fails. If, on the other hand, one of the shock absorbers (a sub-sub-system) fails, the suspension sub-system becomes unsatisfactory, and you get a bumpy ride, but the car still operates as a transportation system.

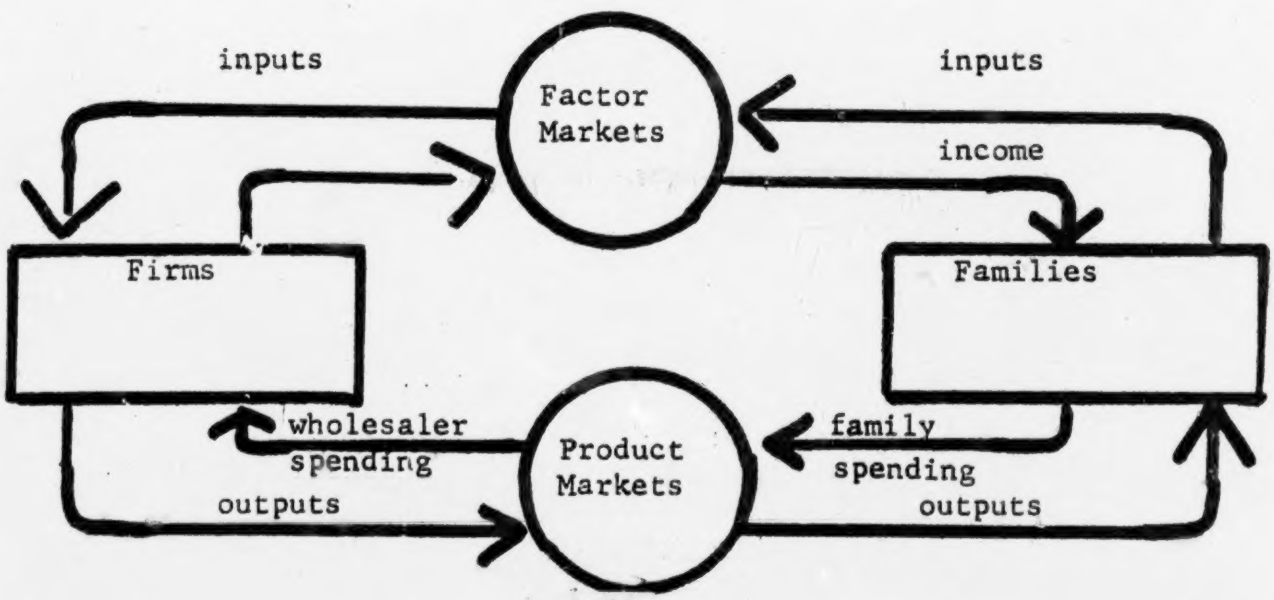
FRAME 16

Summary up to this point

- A system is (a) an orderly arrangement of parts
  (b) into a whole
  (c) to perform a specific function.
- Within a system there often exist sub-systems and sub-sub-systems, each having a different function that contributes to the operation of the whole.
- Each part of a system is related to at least one other part.
- If one part of a system fails, the whole system is affected in some degree.

FRAME 17

Let's turn our attention to the circular flow diagram of the U.S. economy:


inputs
Factor Markets
inputs
income
Firms
Families
wholesaler spending
Product Markets
family spending
outputs
outputs

FRAME 17 (continued)

Which of these conditions does the diagram fit?

_____ (a) A collection of parts

_____ (b) Organized into a whole

_____ (c) For a specific function

(a), (b), and (c)

FRAME 18

Therefore the circular flow diagram describes a

....

system

FRAME 19

Do any of the individual parts of the circular flow diagram meet the conditions of a system: If so, list all of those that do:

____

____

____

____

Families
Firms
Factor markets
Product markets

FRAME 20

All four of the major parts of the circular flow diagram are "systems within the system." Since each is a system, each has a function.

See if you can match each system on the left with its proper function. The first one is done for you:

Families __3__ 1. Convert factors into finished products.

Firms ______ 2. Match the needs of consumers with the available products.

Factor markets ______ 3. Supply factors of production; consume products.

Product markets ______ 4. Match the needs of producers with the available factors.

______ Firms: Convert factors into finished products.

______ Factor Markets: Match the needs of producers with the available factors.

______ Product markets: Match the needs of consumers with the available products.

FRAME 21

The circular flow diagram depicts three basic functions of the U.S. economic system.

(a) What functions are shown?

....

....

....

(b) The overall function of the economic system is to satisfy:

....

(a) production, consumption, exchange

(b) The function of the economic system is the familiar satisfaction of wants.

FRAME 22

Let's examine what happens in the circular flow description of our economic system if there is a change in one of the sub-systems. Suppose the rate of spending by families slows down. Will it affect the product market?

_____ (a) Yes

_____ (b) No

Yes

FRAME 23

If family spending decreases, the rate of sales in the product market will:

_____ (a) rise

_____ (b) fall

_____ (c) stay the same

(b)

When families spend less, sales of products decrease.

FRAME 24

What effect, if any, will falling sales in the product market have upon firms. Production will:

_____ (a) be increased

_____ (b) be decreased

_____ (c) stay the same

(b)

If the product market needs fewer of its products, a firm should decrease production.

FRAME 25

When a firm decreases its production, it needs fewer services from the factors of production. Thus the chain reaction reaches to the factor market and then back to the family (the owner of the factors of production.)

So we can say that because families reduced consumer spending, demand for the factors of production:

_____ (a) increased

_____ (b) decreased

(b) decreased

FRAME 26

When families reduce consumer spending, demand for the factors of production is reduced. Or, to make that statement in a more general way, because there was a change in one of the sub-systems, there was a change throughout the system.

As you can appreciate, the circular flow diagram is a greatly simplified model of the money system in our economy--real life is always much more complicated in a society like ours. But is does allow us to make this important point:

> Whenever a change occurs in the total economic system, we usually have to examine one of the sub-systems to find the cause.

Economics is a complicated field that reaches into almost every part of our lives. It has many experts studying its specialized aspects. As a first step toward simplifying the analysis of economics, we divide the topic into two broad areas: macro-economics and micro-economics.

MICRO-is a prefix meaning "little." MACRO-means just the opposite, "big."

(a) When we study the overall economic system, we are studying ....-economics.

(b) When we study the various sub-systems of economics, we are studying ....-economics.

(a) macro-

(b) micro-

FRAME 27

(a) Since the study of trade relations between different countries involves an analysis of the "big picture" we call this study

______________-economics.

(b) A study of product markets in the U.S. on the other hand, is a study of a sub-system; therefore, we call this study ______________-

______________________.

(a) macro-

(b) micro-economics

FRAME 28

The circular flow diagram depicts the money flow throughout a whole nation's economy.

(a) Therefore the diagram is a part of the

study of ______________-economics.

(b) The study of the effects of Russia's foreign policy on world trade would be

_____________-________________.

(a) macro-

(b) macro-economic

FRAME 29

A study of the spending habits of an individual family would be the concern of

_______________-economics.

micro

FRAME 30

Summary

- The circular flow diagram depicts a system.
- Within the system are four major sub-systems.

  Families
  Firms
  Factor markets
  Product markets

- Within each sub-system, further divisions can be made to form sub-sub-systems.
- The circular flow diagram greatly simplifies what actually happens in the U.S. economy, but it does indicate how the sub-systems fit into the larger system.
- If something happens to change conditions in one of the sub-systems, the flow throughout the whole system is affected.
- The study of conditions in the sub-system is a part of micro-economics ("small-picture" economics).
- The study of what occurs in the total system -- that is, the total U.S. economy -- is the concern of macro-economics.

UNIT 1
LESSON NO. 5

PROGRAM
CRITERION TEST

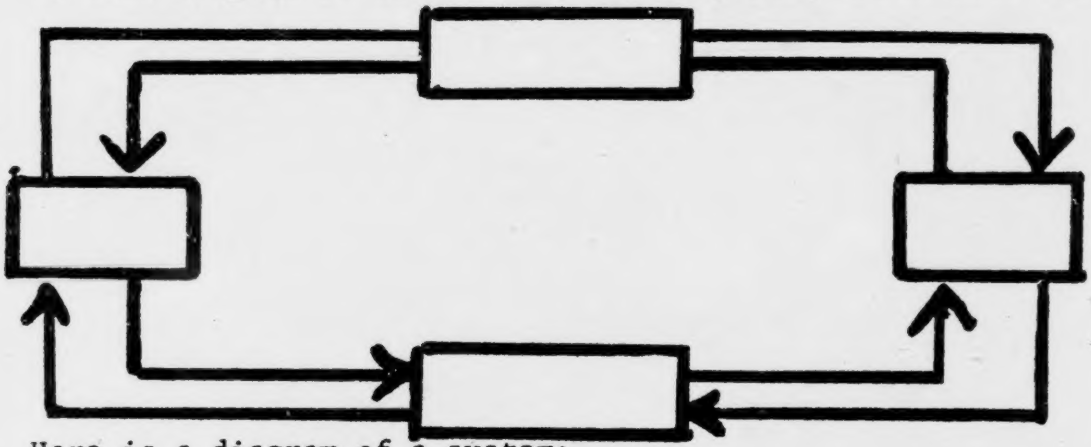
1. A system always satisfies three conditions. What are they?

____

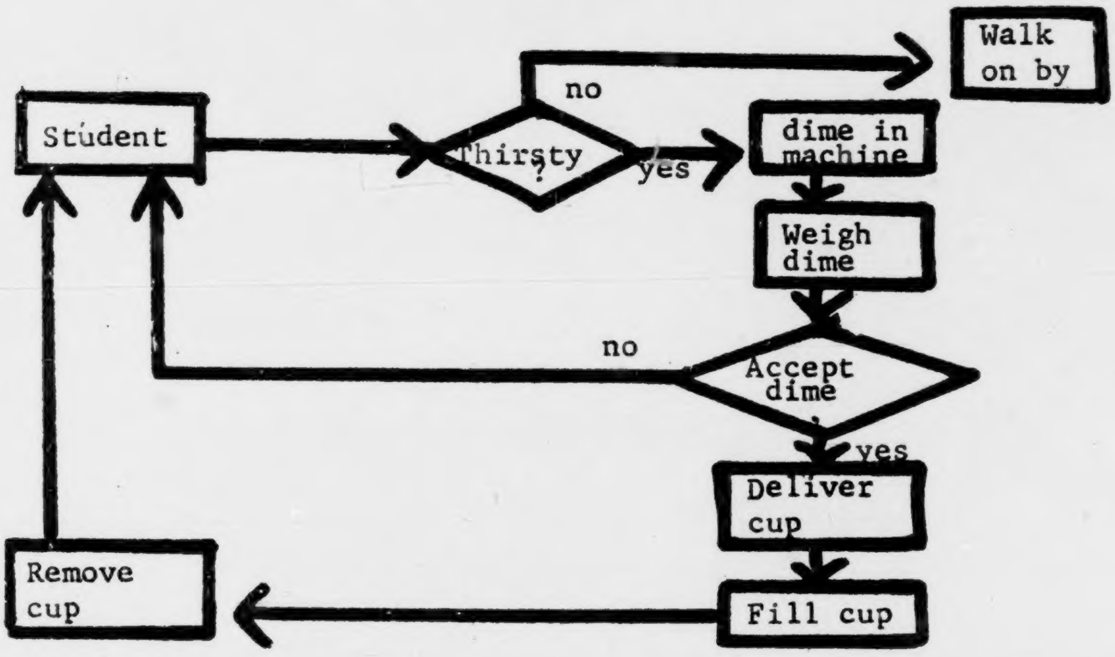
____

____

2. In this diagram of the circular flow system, label four sub-systems.



3. Here is a diagram of a system:


Walk on by
no
Student
Thirsty ?
yes
dime in machine
Weigh dime
no
Accept dime ?
yes
Deliver cup
Remove cup
Fill cup

(a) What is the function of the system?

(b) Name at least two-sub-systems.

(c) What are the functions of the sub-systems?

Criterion Test (continued)

4. Complete the blanks at the right to show whether the description is of a macro- or a micro-activity.

   (a) System showing the overall "big picture" operation. __________ - system

   (b) Landing gear of an aircraft. __________ - system

   (c) Circular flow diagram __________ - economics

   (d) Wage levels in the petroleum industry. __________ - economics

   (e) The organization of General Motors __________ - economics

   (f) Study of the factor markets in the U.S. __________ - economics

5. True or False?

   (a) All parts of a sub-system are also parts of the total system. __________

   (b) A sub-system meets all of the conditions of the definition of a system. __________

   (c) A sub-system performs the same function as the system to which it belongs. __________

   (d) A sub-system is simply a system within a system. __________

ANSWERS TO CRITERION TEST

1. A collection of parts
   organized into a whole
   for a specific function

2. Reading from extreme left, clockwise: firms, factor markets, families, product markets

3. a) to relieve thirst by giving a filled cup for a dime

   b) 1-thirst testing system
      2-dime testing system
   c) 1-to determine whether or not a person is thristy
      2-to accept or reject coin put in the machine

4. a) macro
   b) micro
   c) macro
   d) micro
   e) micro
   f) micro

5. (a) true, (b) true, (c) false, (d) true

UNIT I
LESSON NO. 5

LESSON
CRITERION TEST

Part I: THE CIRCULAR FLOW DIAGRAM

DRAW AND COMPLETELY LABEL A CIRCULAR FLOW DIAGRAM FOR THE U.S. ECONOMY SHOWING FACTOR AND PRODUCT MARKETS. (compare your diagram with the one in Chapter 5 of the text and, if necessary, correct yours to make it complete.)

USE THE COMPLETED DIAGRAM TO ANSWER THE FOLLOWING QUESTIONS:

1. The five economic activities are: production, consumption, exchange, saving, and investment. Circle those words which are included in the circular flow diagram for the U.S. economy.

2. List the economic institutions which are shown or implied in the circular flow diagram:

3. In the circular flow diagram shown above, what are the major economic institutions of the U.S. which are missing from the diagram?

4. Among other things, the circular flow diagram describes: (check one)

_____ (a) any society using an exchange system

_____ (b) a society in which money is the medium of exchange

CRITERION TEST (continued)

5. According to the diagram, which economic institution receives property income? ______________________________

6. According to this diagram, who owns the firms? __________________

7. According to the diagram there are money exchanges in: (check one)

_____ (a) purchase of inputs by firms

_____ (b) purchase of outputs by families

_____ (c) both of the above

_____ (d) neither

8. Consumer spending takes place: (check one)

_____ (a) factor markets

_____ (b) product markets

9. The inputs used by producers are purchased in: (check one)

_____ (a) factor markets

_____ (b) product markets

10. Check those statements that are true about the exchanges shown by the circular flow diagram. The diagram shows exchanges:

_____ (a) between firms

_____ (b) between families

_____ (c) between firms and families

_____ (d) between firms and financial institutions

_____ (e) between firms and government agencies

_____ (f) between families and banks

_____ (g) between families and government agencies

11. Check those statements which correctly complete the sentence: The circular flow diagram describes:

_____ (a) what is produced.

_____ (b) what factors of production are used.

_____ (c) how goods and services are produced.

_____ (d) which kind of economic institution produces goods and services.

(Selections (e) through (i) on the next page)

CRITERION TEST (continued)
Question 11 (continued)

_____ (e) how output is distributed.

_____ (f) where output is distributed. (exchanged)

_____ (g) the quantity of inputs used.

_____ (h) the amount of output produced.

_____ (i) shy money circulates.

12. Check any of the following that would not be considered family income in the circular flow diagram:

_____ (a) wages

_____ (b) income from selling a house

_____ (c) health insurance paid to all employees by the employer

_____ (d) a fee received by a lawyer

_____ (e) devidends paid to stockholders of a corporation

_____ (f) rent income to a factory owner

_____ (g) an inheritance

_____ (h) a store manager's salary

13. Indicate with the letter shown, whether the following exchanges take place:

(f) in a factor market
(p) in a product market
(n) neither market

_____ (a) An employment agency recruits a new typist for one of its clients.

_____ (b) An auto dealer sells you a car.

_____ (c) A boy's family pays him for mowing the lawn.

_____ (d) A real-estate agent sells your house for you to another family.

_____ (e) A trade union negotiates a new contract for its members.

_____ (f) You buy bread from the corner grocery store.

_____ (g) A teacher is paid for conducting a night class.

_____ (h) A drug store buys transistor radios from a wholesale distributer.

14. Which of the following economic institutions are accounted for in the circular flow diagram for the U.S.? Answer by stating whether it is included in the firm box, the family box, the product market circle, the factor market circle, or not included anywhere.

a. ________________________________ Post Office

b. ________________________________ private hospital

c. ________________________________ supermarket

d. ________________________________ steel manufacturer

e. ________________________________ railroads

f. ________________________________ employment office

g. ________________________________ savings and loan company

h. ________________________________ Power plant owned by the city of Palo Alto

15. Check the following exchanges which are not shown in the circular flow diagram:

_____ (a) interest payments from a government bond

_____ (b) purchase of a new house

_____ (c) purchase of a used car

_____ (d) purchase of A.T. & T. stock certificates

_____ (e) purchase of a farm

16. Check the following aspects of specialization which are shown on the diagram:

_____ (a) stages of production

_____ (b) round-about production

_____ (c) division of labor

_____ (d) money exchange

_____ (e) factor specialization

_____ (f) separate production and consumption institutions

17. Why can't you use this circular flow diagram to depict the two American Indian economies that we studied in Lesson 4?

    See if you can make an exchange diagram which describes the exchange relations between economic institutions in one of the Indian economies studied:

UNIT I
LESSON NO. 5

LESSON
CRITERION TEST

Part II: CIRCULAR FLOW MODEL AND MACRO-ECONOMICS

1. The total amount of money (receipts) received by business firms for the sale of output in a given period is called:

_____ (a) National Income

_____ (b) Gross National Product

2. The circular flow model implies that Gross National Product is:

_____ (a) equal to National Income

_____ (b) less than National income

_____ (c) greater than National Income

_____ (d) not related to National Income

3. The circular flow model suggests that Gross National Product is:

_____ (a) equal to consumer spending

_____ (b) less than consumer spending

_____ (c) greater than consumer spending

_____ (d) not related to consumer spending

4. In reality is this true? What is true? State why.

a. GNP = Consumer Spending

b. GNP   Consumer spending

c. GNP   Consumer spending

d. GNP not related to consumer spending

5. Check any of the following which the circular flow model does not show and, which, therefore, equals zero in the model.

_____ (a) consumer spending

_____ (b) government spending

_____ (c) gross national product

_____ (d) savings

6. In the circular flow model, if the output for 1965 were equal to 400 billion dollars, what would National Income before 1965 be?

_____ (a) 400 billion

_____ (b) more than 400 billion

_____ (c) less than 400 billion

_____ (d) can't tell

7. Which of the following represents a flow?

_____ (a) $300 million

_____ (b) 4 cars per day

_____ (c) 915 men

_____ (d) income from lending money

8. Which of the following is a stock? (check one)

_____ (a) 1966 sales of $3 million

_____ (b) 12 million gallons of salt water

_____ (c) 93 units per month

_____ (d) 1200 crates of oranges in a warehouse

9. Which of the following is measured by a rate? (ratio)

_____ (a) flow

_____ (b) stock

10. Among the following, identify those that are flows and in the space provided below the statement, restate them as rates.

_____ (a) a business produced 5000 pairs of shoes in 1965.

____

_____ (b) a business owed $50,000 to a bank at the end of 1965.

____

_____ (c) on June 30, 1964, the XYZ Corporation sold $1 million new stock certificates.

____

_____ (d) John Doe earned $1000 in November and December, 1966.

____

11. Which of the following is a flow?

_____ (a) GNP

_____ (b) National Income

_____ (c) the total wealth owned by U.S. citizens

_____ (d) the total amount of inventories existing in the U.S.

12. In your own words, define (a) stock, and (b) flow as these words are used in economics:

(a) STOCK:____

____

____

(b) FLOW:____

____

____

____

13. Check all of the following statements which are correct descriptions of the circular flow model or the economy described by the model:

_____ (a) The diagram gives a complete description of the U.S. economy.

_____ (b) Consumer spending always equals national income.

_____ (c) GNP is production measured in money units (prices) instead of "real" units. (tons, board-feet, etc.)

_____ (d) If GNP for a given year is $650 billion, it means that the economy operated at a rate of $650 billion per year.

_____ (e) The diagram shows what goods and services are produced.

_____ (f) The diagram shows the part played by banking institutions in the economy.

_____ (g) The diagram explains how the economy grows.

_____ (h) The diagram shows how scarce resources are allocated between businesses.

_____ (i) All factors of production are not shown.

_____ (j) Round-about production is not shown.

_____ (K) The diagram does not describe barter economy.

UNIT I
LESSON 5

ANSWERS TO CRITERION TEST
Part I

1. production, consumption, exchange

2. private business firms, families, labor unions, and other organizations which operate in product + factor markets.

3. government, financial institutions, labor unions

4. (b)

5. families

6. families

7. (c)

8. (b)

9. (a)

10. (c)

11. (d), (f), (i)

12. (b), (g), (h)

13. F, P, N, N, F, P, F, P

14. (a) not, (b) firm, (c) product (d) firm (e) product, factor, firm (f) factor (g) not (h) not

15. (a), (c), (d), (e)

16. (d), (f)

17. There are not separate producing and consuming units and not much money exchange.

UNIT I
LESSON NO. 5

ANSWERS TO CRITERION TEST
Part II

1. (b)

2. (a)

3. (a)

4. (c) In addition to consumer spending, there is government spending on new real, capital, and spending by foreigners.

5. (d)

6. (a)

7. (b) (d)

8. (b)

9. (a)

10. (a) 5000 per./yr.

11. (c) (d)

12. **FLOW:** measures a rate of activity

    STOCK: measures a quantity which exists at some point in time

13. (b), (c),(d), (i), (k),

LESSON 7

PROGRAM ON THE DEFINITION OF ECONOMICS

FRAME 1

This is a good place to round up some of the ideas we have been talking about, to refine them a little, and to arrive at a more careful definition of what economics is.

We began with the thought that economics examines how we dispose of scarce resources in satisfying the wants of mankind.

Then we pointed to some of the chief interests of the economist:

- --activities with which economics is concerned (production, consumption, exchange, savings, and investment);
- --decisions to make about the use of scarce resources (what, how, for whom, and how much to produce);
- --organization and operation of economic systems and institutions (operating under the influence of the norms and goals of the society).

These economic activities and decisions, along with the functioning of economic systems and institutions, are all the outcome of human actions, or, to use the proper word, of human behavior.

Suppose as a first step toward a definition, we combine these statements in one sentence. Is the following a good summary?

> Economics is the study of man's behavior as he seeks to satisfy wants through the disposal of scarce resources.

Well, there's room for opinion here, of course, but we feel that this definition says it--at least as far as present discussion has gone.

FRAME 2

Now take a look at another definition. What do you think of this one?

> Economics is the science which studies behavior as a relationship between ends and scarce means which have alternative uses.

What you feel about it is again your opinion.

However, it is the definition on which most economists agree. It comes from a British economist, Lionel Robbins, and has stood the test of 30 years of debate.

Look at it more closely.

First, Robbins uses the words "ends" and "scarce means" where we have preferred to say . . . what? ____________________ and

__________________________.

We have said "wants" and "scarce resources" where Robbins says "ends" and "scarce means." But the meanings are the same.

FRAME 4

Notice that Robbins says, "scarce means which have alternative uses." Why is he so particular about "alternative uses"?

Suppose we have a resource which is scarce (i.e., there is not enough to satisfy all the desires for it, but which has no alternative use. What economic decisions would it be unnecessary to make about this resource? (May be more than one of the below)

_____ (a) What to produce

_____ (b) How to produce

_____ (c) For whom to produce

_____ (d) How much to produce

(a) and (d).

For the scarce resource with just a single use, it would not be necessary to decide what to produce or how to produce the output. And even decisions regarding "for whom" and "how much" are simplified. It is when resources have alternate uses that decisions are hard to make.

FRAME 5

If we must decide how to share a resource between a number of possible uses, the situation gets much more involved. The problems which result are of primary interest in economics.

FRAME 5 (continued)

Take another look at Robbins' definition. It contains one word which we have not used or discussed up to this point. What is it?

Robbins rightly calls economics a science. And that has some implications. Let's see what they are.

FRAME 6

The sciences are divided into two broad groups: (1) the natural or physical sciences, and (2) the social sciences. The former, as their name implies, study what happens in the natural and physical world and include biology, chemistry, physics, geology, and astronomy. The latter study the social world--people, and in particular, people in groups.

The social sciences include:

Anthropology: The study of the physical and cultural characteristics of man, particularly of primitive man.

Political Science: The study of government and political power.

Sociology: The study of society, the forms of groups within society and the interaction of these groups with one another.

Psychology: The study of the individual in relation to others--including how his behavior affects and is affected by behavior of the group.

Economics: (we're working on this definition)

If you are acquainted at all with the sciences, you might be used to thinking of each science as a separate subject. At first, that is a convenient way to look at them. The more you learn about the sciences, however, the more dividing lines will get blurred. This is particularly true of the social sciences.

For example, suppose we study a dispute over wages and working conditions between an industry and a labor union. Which of the social science disciplines is involved? Certainly, economics. And, since groups of people are involved--families, the locals of the union, companies--this, then, could be a topic for the sociologist as well as for the economist. The psychologist would also want to observe the effects on individuals within the various units.

Thus, a problem from real life can involve several of the social sciences. And, important, each scientist will study the problem from the viewpoint of his particular science.

FRAME 6 (continued)

In the study of how religious groups have affected a modern city's political power structure, we find another area that involves the social sciences. In addition to political science, which of the following disciplines are likely to be most involved?

_____ (a) sociology

_____ (b) anthropology

_____ (c) psychology

(a) and (c).

The sociologist is interested in the interaction of groups of people; the psychologist takes a closer look at the individual. (the anthropologist is less apt to be directly involved since his interest tends to concentrate on primitive societies.)

FRAME 7

Are economic issues also likely to be present in a study of this sort?

Yes.

The problems of economics are everywhere in politics. And because the reasons for religious groups taking part in politics may be partially economic, economists want to observe such interaction. Their study is part of their continuous search for understanding.

FRAME 8

As we said, each social scientist looks at human problems from a different perspective. The sociologist seeks to explain how order in our society is established and maintained, and the psychologist probes to uncover what lies behind men's actions as individuals within a society.

Where does the economist fit into the picture?
What is the chief problem he wants to explore?

> The economist studies the problem of how a society allocates its scarce resources to satisfy the wants of its members.

FRAME 9

As a social scientist, reaching out for better ways to identify and describe economic issues, the economist uses scientific methods and attitudes. These are techniques that help scientists extend knowledge of the world through explanations that they derive from analyzing data.

This is not to say that a scientist never guesses, nor that he does not have theories and opinions like the rest of us. But it does say that the conclusions a scientist arrives at and the predictions he makes must be consistent with the facts. Thus, in using the scientific method:

(1) assembles data about the thing he is studying,

(2) on the basis of the data, he sets forth an informed guess about what the object of his investigation is or does (this is called "stating a hypothesis"),

(3) tests the hypothesis against new data,

(4) on the basis of the test results, accepts, or rejects the hypothesis,

(5) this process provides further insights into the problem under study, thus permitting the scientist to form new hypothesis.

For a very simple example of the scientific method, we can turn to the natural sciences.

> Suppose a chemistry class has the problem of identifying a liquid. One of the facts it has on hand is that a solution is acid if blue litmus paper dipped in it turns to red.
>
> Can you state a hypothesis for this situation?

____

____

____

The hypothesis might go like this: "the liquid is acid (or base)."

The test is simply to dip the litmus paper in the solution. By doing that, the class can add another fact to its collection; if the paper changes color to red, the solution is acid and the hypothesis is accepted.

FRAME 10

One of the basic concerns of science is to discover the "laws" by which various things operate. Such laws are regularities, discovered through scientific investigation. They consistently predict what will happen in given circumstances. (It's worth mentioning that the name "laws" is a holdover from the 19th century when scientists were much surer than they are today, that they were truly unlocking the mysteries of the universe. These days, we recognize that a law represents the most accurate current thinking but that some new discovery may show us that it is less accurate or less universal than it was thought to be.)

For a number of reasons, there are many more such laws in the natural and physical sciences than there are in the social sciences. Thus, a physicist can predict with great accuracy the period of swing for a pendulum of a certain length, simply by using the law that governs it. But a social scientist finds it hard to predict how people will vote in an election, for example, or how they will spend their income. The fact that social scientists study people creates certain difficulties. It's hard to tell what is going on inside someone's head. We cannot tell what a man thinks or how he arrives at a conclusion. But we can observe and note as a fact what he does as a result of his thinking.

Can you supply the word the scientist uses for the phrase "what a man does as a result of his thinking"?

"behavior"

the observable actions taken by a person

FRAME 11

The scientist takes the facts as he sees them and uses his ingenuity and intuition to probe further and to formulate laws, theories, and hypotheses.

All social scientists study some aspect of behavior, and--as we mentioned earlier--it is rarely possible to classify a real-life problem as belonging to just one of the social sciences.

FRAME 11 (continued)

The input and output of a factory might seem to be simply the concern of the economist. But on looking closer, we find that input and output can be affected by the morale of the workers (the concern of the psychologist) and by the organization of the management and the workers (more of a problem for a sociologist, probably).

Every economic problem is likely to involve other social scientists, too.

But can we turn this idea over, as it were, and say that there scarcely is a real-life problem in the social sciences that does not in some way interest the economist?

Take, for example, the institution of marriage. When young people are in love and decide to get married, do their decisions involve economic issues?

You'd better believe it! The starry-eyed lovers may not be giving much attention to economics, but they are immersed in economic issues up to their ears.

Here are some of the issues involved in courtship and marriage. Which of them are economic?

_____ (a) income earning capacity

_____ (b) religion

_____ (c) race

_____ (d) personality

_____ (e) physical characteristics

_____ (f) level of wealth

(a) and (f)

are quite definitely economic issues.

The others, as you may have noticed, are all social science issues and most have economic aspects.

FRAME 12

The foregoing pair of economic issues is far from being the entire list. As newly-weds, couples become new economic units, sources of purchasing power (probably credit) for all sorts of things they never had before, a living proof that two cannot live as cheaply as one. By marrying, they will enter into contracts in which, in many states, property becomes jointly owned and in which a husband takes responsibility for his wife's debts.

FRAME 12 (continued)

Marriage involves a much more basic economic decision--based on a real scarcity problem. Since a person is allowed only one spouse at a time in this country, a choice of one marriage partner automatically excludes all other choices. If you marry Suzy (or John), you give up the fun of being married to Jill (or Mark.). The alternative cost of marrying Suzy is the giving up of marriage to Jill.

Next question: How about working on a political campaign? Does this involve economic issues: And if it does, can you name any of them?

____

____

____

____

Yes, economic issues are involved.

If you are personally working in a political campaign, you have, for a start, made a decision about the allocation of at least one of your scarce resources--time.

And, of course, most political campaigns involve controversy over economic issues, elements of "haves" against "have-nots" which call for a redistribution of scarce resources. Presumably, if you join a campaign, you have made some economic decisions on these issues.

FRAME 13

Here's the point: There are economic issues in almost all aspects of our lives. But are these details of an individual life really of interest to the economist? What would be your guess?

_____ Yes

_____ No

No

FRAME 14

Here's Robbins' definition again:

> Economics is the science which studies behavior as a relationship between ends and scarce means which have alternative uses.

FRAME 14 (continued)

This definition and Robbins' other writings make plain what he meant--that economics is concerned with all human behavior that has economic aspects. This leaves the door wide open for the economist to say that any behavior is his province if he can see in it an economic activity, decision, or institution. But . . .

The fact is that the economist of today is much more selective. There are more economic problems than economists can solve. There is a scarcity of economists, too. In any period of history of a society, the economists study that economic behavior which is more interesting to the people living at that time. (Sometimes, and for some societies, no one is interested in economic questions at all, and so there is no study of economics). At the present time, and in the world, it is possible to define more precisely what economists study.

We have said that economics is concerned with all human behavior that has economic aspects. Does this mean that economists are concerned primarily with individuals or with groups?

_____ individuals

_____ groups

with groups

FRAME 15

It is accurate to say that the concern of economics is not with economic activities in themselves (such as the problem a particular gas station owner might face if a new station opened across the street), but with decisions--and with the institutions which make these decisions and perform these activities.

Can you think what some of these institutions might be?

____

____

Economics is concerned with such institutions as the family unit, business firms, labor unions, and government agencies.

FRAME 16

The economist is also concerned with a broader picture, as you saw in studying the circular flow diagram. In taking this larger look, he examines how all of the institutions interact to affect the input and output of the total system.

Thus, we have two broad divisions of economics:

(1) The study of economic institutions which is called __________________-economics.

(2) The study of total economic systems which is called __________________-economics.

(1) micro

(2) macro

FRAME 17

Macro, remember, simply means "big". The comparable word that means "little" is "micro".

So, the science which studies the economic organizations within a society and the relations between these organizations is called __________________________-economics.
(fill in the blank)

micro

FRAME 18

Economic questions which are concerned with the family unit or business firms are the province of ______________-________________.

micro-economics

FRAME 19

Economic questions concerned with a labor union or a financial institution are the concern of _________________-___________________.

Macro-economics

FRAME 20

A study of the effect of union organization on wages in the carpentry trade is said to be (choose one) micro-economic/macro-economic.

micro-economic

FRAME 21

A study of the effect on consumer spending of an increase in federal income tax rates is said to be (choose one) micro-economic/macro-economic.

macro-economic

FRAME 22

In addition to distinguishing between macro-economics and micro-economics, economists often draw a line between "pure economics" and "applied economics." As so often happens in the social sciences, it is sometimes hard to see where one leaves off and another begins, but we can say:

> Pure economics is the purely scientific part of economics which is concerned with increasing knowledge about economic systems. Like other pure sciences, it is concerned with describing, explaining, and predicting the things being studied.
>
> Applied economics is the use of economic knowledge to solve practical problems that involve economic decisions or economic policy. (Policy is defined as a plan of action of a guide for making decisions).

Here's a question: If a group of economists is asked to study the laws which regulate the electric power industry of the U.S., is the group concerned with pure economics or with applied economics?

_______________ Pure

_______________ Applied

The economists' concern in this case would be with pure economics.

FRAME 23

They would collect information to help them describe how the industry operated under present laws, and they would predict what would happen if it was either restricted or encouraged in certain ways. They would, in other words, increase the knowledge about this particular economic system. But there they would stop. It would be up to some other group to decide whether new laws and controls should be imposed.

Let's suppose that a study group is set up to make recommendations as to how much land in a state should be devoted to state parks.

Is this study concerned with pure economics or with applied economics?

_____ Pure

_____ Applied

This time it's applied economics.

FRAME 24

As before, there will be a lot of data gathering (the location and amount of land involved, for instance) and some predicting (expected needs for land for industrial and residential expansion, and so on). But the function of the group is to make recommendations, to set down a plan of action or to provide guidelines with which others may make decisions. Thus this group is concerned with applied economics.

We might sum it up by saying:

In pure economics, we try to increase the body of knowledge in the field. In a sense, we are not concerned what the outcome is so long as it is an accurate prediction of what will happen in a given group of circumstances. The test of pure economics is whether it succeeds in explaining and/or predicting.

In applied economics, on the other hand, we are dealing with the practical problems of the real world. From the start, we know something about what the outcome must be and the job is to make decisions or shape policy which will give us the outcome we seek. The test of applied economics is whether the decisions or policies work in achieving the intended goal.

Let's summarize:

Robbins' definition: Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses.

Another definition: Economics is the social science which studies how people decide between alternative uses of scarce resources to satisfy their wants.

Important points:

(1) Economics is basically concerned with the scarcity problem that arises when scarce resources have alternative uses.

(2) Economics often overlaps into other social sciences.

(3) Because economics is a social science, it uses scientific attitudes and methods to study human behavior.

(4) Many human problems have economic aspects, but they do not concern the economist.

(5) The human behavior that interests the economist is economic-decision making by economic institutions (families, business firms, labor unions, government, etc.).

(6) Micro-economics is the study of economic institutions or groups of economic institutions.

Macro-economics studies the performance of the whole economy.

(7) Pure economics increases the body of knowledge (facts, theories and laws) about economic behavior.

Applied economics deals with scientific work to solve a practical economic problem.

1744
c2

ED053048

DRAFT COPY: FOR RESTRICTED USE ONLY

SOCIAL SCIENCE EDUCATION CONSORTIUM

MATERIALS DEPOSI

[redacted]

ECON 12

TEXT AND READINGS

UNIT 1

SPRING, 1968

TEST EDITION

Copyright, 1967

CENTER FOR ECONOMICS EDUCATION
SAN JOSE STATE COLLEGE
SAN JOSE, CALIFORNIA

SO 001 700

UNIT I

TABLE OF CONTENTS

TEXT		TEXT PAGE
Prologue		1
Chapter 1	A First Look at Economics: Its Subject and Importance	2
Chapter 2	Organizing Production	10
Chapter 3	Exchange, Money, Credit and Capital	17
Chapter 4	A Model for Comparing Economics	27
Chapter 5	The Economy is a System	37
Chapter 6	Economic Efficiency and the General Welfare	43
Chapter 7	A Summary Description of Economics	53

READINGS			READINGS PAGE
Lesson 1	Introduction		64
	Reading 1	"The Shoemakers Defense"	67
	Reading 2	"The Shoemakers Decision"	68
	Reading 3	"The National Labor Relations Act, 1935"	73
	Reading 4	"The Unions Come Into Their Own"	74
	Reading 5	"Hunger and Scarcity"	76
Lesson 2	Reading 1	"The Importance of Capital"	78
	Reading 2	"The Nature of Capital"	80
	Reading 3	"Automobile Manufacture, A Mass Production Industry"	81

Lesson 3	Reading 1	"The Nature and Importance of Inc.: Corporations in the U.S."	83
	Reading 2	"The Era of Bankers"	85
	Reading 3	"Description of J. P. Morgan and Company"	86
	Reading 4	"Financing the Infant Automobile Industry"	87
	Reading 5	"Formation of General Motors"	90
	Reading 6	"The Credit Revolution: The Great (Cashless) Society"	91
Lesson 4	Reading 1	"The Kiowa, A Plains Indian Tribe"	95
	Reading 2	"The Tsimshian of the Northwest Coast"	99
	Reading 3	"Industrial Production in the Soviet Union"	104
	Reading 4	"The Boston Ice Trade"	107
	Reading 5	"Building and Using Models in Economics"	110
Lesson 5	None		
Lesson 6	Reading 1	"Negro Insurrections: The Crisis of Urban America"	114
	Reading 2	"The Shift from Moderates to Militants: A Separate Path"	118
	Reading 3	"Capitalism and Freedom"	123
	Reading 4	"The State and Revolution -- Class Society and the State"	128
	Reading 5	"The Programme of the Communist International"	129
	Reading 6	"Some Claims on Behalf of Free Enterprise"	130
	Reading 7	"A Contribution to the Critique of Political Economy"	133

Lesson 7 Reading 1 "Economic Possibilities for our Grandchildren" 142

Reading 2 "The Invisible Land" 147

PROLOGUE TO UNIT I

Economics is the science which studies how groups of people make decisions about how to use their scarce resources in order to satisfy their wants.

In the chapters to follow we will study more carefully the meaning of such things as scarcity, wants, resources, and decision making. We will also study the various economic activities found in all economies and how these activities are organized into economic systems. By the time you get to the end of Unit I, you will have a frame of reference for studying the economic problems which currently face our society.

By a frame of reference we mean that you will understand the definition of economics and how economics relates to the other social sciences. You will also understand and be able to use the vocabulary of economics. This understanding will allow you to make sense out of the more detailed study of our economic system which is presented in Units II and III.

If you want to know exactly where you will be when you finish Unit I, turn to Chapter VIII which gives two diagrams showing all of the economic concepts which are used in creating this frame of reference. You will probably not understand the diagrams very well until you finish all the lessons in Unit I but you can refer to them as you progress through the lessons and this will allow you to keep a mental record of where you are, where you've been, and where you are going.

CHAPTER I

A FIRST LOOK AT ECONOMICS: ITS SUBJECT AND IMPORTANCE

I. Man's Desires and Their Satisfaction

It is the unusual person who doesn't want something. Most men are driven through life by the force of their wants--a mixture of physical needs and psychological desires with no clear dividing line between them. Physical wants are simply what is needed to sustain life--the minimum requirements of food, clothing and shelter. Psychological wants begin where these end and are the desire for MORE. These are the 'appetites which grow by what they feed upon.'

But why do people keep striving for MORE? Where do physical/psychological needs and desires come from? Why is it that most of us are rarely completely satisfied for long? There are many answers, but most of them stem from the inseparability of physical and psychological wants.

Physical needs keep recurring--(we get hungry, clothes wear out, we need sleep) and they change over time because of changes in environment (in the winter we need heavier clothes, we move to a different place) or because we age (at three months our bodies require milk; at thirty, we need a more substantial diet; at seventy, perhaps, only hospital care will keep us alive).

Add the psychological dimension to recurring physical needs and you get the modern way of life! If we become accustomed to steak, a wardrobe of clothes and two bathrooms, it takes MORE to satisfy the recurring physical needs, because they become mixed with our psychological desires. We need a new car every other year, new shoes every time the old ones get scuffed up. In addition, our psychological wants change as our tastes develop. As new products are invented, we acquire a taste for them. Today the market basket of goods for most families includes frozen foods, nylon stockings, aluminum foil, hair spray, electric razors--things which we never dreamed of even thirty years ago.

Finally, the process of satisfying wants in an industrialized society such as ours brings increasing complexity in our lives, and this complexity creates new physical and psychological wants. For example, the place we live, the kind of job we have, and the kinds of things we consume all influence our wants. The automobile enabled Americans to move to the suburbs in vast numbers and because of this the cities slowly became dependent on the automobile. As highway systems were built to serve the needs of the commuters businesses could also use this highway system and they moved from the inner city to the suburbs. The movement of business brought the decline of inner city transportation systems. The result was to make the automobile an economic necessity for millions of people--without a car most of us simply could not get to work each day.

The need to consume the automobile has led to a vast array of other wants. Drive-in businesses of all kinds have flourished and the shopping center, with its acres of parking spaces, has become a major means of marketing consumer goods. The supply of other consumer items has led to a similar growth of new wants. For example, the supply of multiplex stereo signals by radio stations and color T.V. signals by T.V. stations creates a demand for multiplex receivers and color

T.V. sets. The supply of frozen foods has led to demand for larger and more efficient home refrigerators. The list of such chains of events is almost limitless and one has but to look about him to see how the satisfaction of our wants leads to the creation of ever expanding array of new wants.

We assert that for most men the MORE remains. It is hard to imagine that it can ever be wholly and for all time satisfied. From this assertion, comes the *need* to study economics.

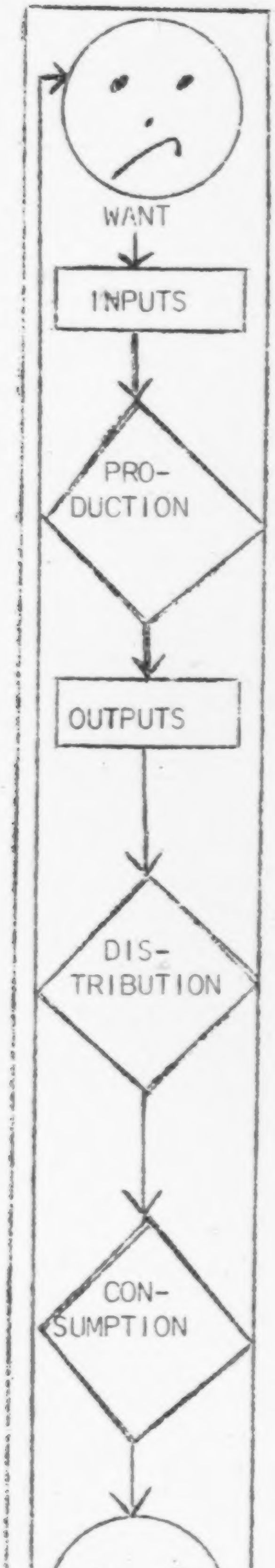
II. The Want-Satisfaction Chain

The things needed to satisfy wants are produced from resources--land, air, water, minerals, plants, animals, people. Resources, as they exist in their natural state, usually cannot satisfy modern man; they must first be processed and often drastically changed. They are the INPUTS of some production process, which transforms them into the goods and services, or OUTPUTS, that satisfy what people need or want to consume.

But once produced, the output often is still not available for us. It must be transported from the factory to stores or otherwise be made available to the ultimate consumers; that is, the output must be distributed among the people who will use it.

Production and distribution of all the output in the United States involves many, many operations which use up both time and resources. The accompanying diagram is a simplified summary description of the chain of events involved in satisfying wants. In later chapters we will fill in the details of the actual operations; here it is only necessary to grasp the basic idea.

The WANT-SATISFACTION CHAIN shows that the process of getting what we want requires a chain of activities: inputs are *put in* to a PRODUCTION PROCESS (pigs go to the packing house); production transforms inputs, turns them into outputs (pigs become sausages); the outputs are transported and given out to different people through a series of DISTRIBUTION activities (sausages are trucked to the supermarket where they are available to anyone who will pay the price); the people consume, use, the output (in this case someone eats the sausages); CONSUMPTION of the output gives satisfaction (hunger disappears temporarily). The diagram below shows this sequence. The boxes ▭ represent the resources and products which satisfy wants. The diamonds ◇ represent the ECONOMIC ACTIVITIES people engage in to bring about this satisfaction.



WANT-SATISFACTION CHAIN

INPUTS are the natural, human and man-made resources used to produce the things we want. For example, they are the steel, glass, plastics, factories, labor, engineering, dyes, assembly equipment, etc., used to make automobiles.

PRODUCTION is the process of transforming inputs into something which more adequately satisfies human wants. In the above case, it is the fabricating, then the assembling of the thousands of parts which go into a finished automobile.

OUTPUTS are the finished products of the production process--the automobiles.

DISTRIBUTION means all those activities required to make output available to the people who will use it to satisfy their wants. This includes transporting and storing output, as well as making it available at retail stores. For automobiles the new cars are shipped by trucks or trains directly to auto dealers, who store and sell them.

CONSUMPTION is the process of making use of goods or services for the satisfaction of human wants. Some outputs are physically "consumed" (eaten) in the act of consumption. Others, like a car, are "consumed" by wearing them out, over a period of time.

III. Economics and the Scarcity Problem

Economics, as a subject of study, exists because happiness is not just a want-satisfaction chain. The fact that satisfaction is linked to wants suggests that the want-satisfaction chain is a never-ending cycle, that people are never permanently satisfied, that their wants continually require people to engage in economic activities. Why? Why all the work to keep us semi-satisfied?

The problem that lies at the heart of economics is that resources are scarce. At any time there are not enough available resources to satisfy our wants.

SCARCITY exists when there is a gap between what people want and the resources available to fill the want. Scarcity does not mean "few"; it means "not enough." The "not enough" means that an inequality exists between wants and the resources available to satisfy them. WANTS are greater than available RESOURCES. This can be stated by a mathematical formula called an inequality. WANTS $>$ available RESOURCES. (In mathematical notation $>$ means"greater than.")

Detecting the existence of scarcity always requires a comparison between wants and resources. The existence of wants is a necessary condition. However, only if WANTS $>$ available RESOURCES are the necessary and sufficient conditions for the existence of scarcity satisfied. A large supply of a given resource can exist, but if wants are still greater than the amount of the resource, or if the resource is not available at that time, scarcity exists. There is a lot of water in the world, but for each of us, water has been scarce at some particular time in our lives.

On the other hand, a very small amount of a resource may exist but if no one wants it, it is not scarce. A particular artist may have a unique talent, but unless the public desires his work, his artistic labor is not a scarce resource. It only becomes scarce if the public tastes change.

The scarcity inequality exists for two reasons--one related to the nature of man and one related to the nature of the physical world. On the left side of the inequality are human wants which are determined by physical and psychological factors. We have already seen that there seems to be no end to our capabilities to want, that, in fact, what we want depends on what is available to have. On the right side of the inequality is an amount of resources which is fixed for any one time. Within a limited period of time, it is not possible to produce all of the things people want from the available, fixed amount of resources.

The scarcity condition and man's sense of urgency in satisfying his wants within a limited time period arise from the fact that he is mortal. Each of us is going to die and we know it. Our drive to stay alive drives us to economic activity. If we knew we would never die, then at least physical wants would not exist and psychological wants would be less important. What you don't satisfy today you can always satisfy some other day. Our mortality creates the true scarce resources--our time here on earth as a living person. To stay alive and enjoy we engage in economic activity. In addition, our knowledge of our limited life time means that we do not have enough time to do everything we want; we must choose between alternatives--whether to work or sleep, play tennis or dance, buy this or that. The certainty of death means that we are all faced with scarcity; it is a condition created by our human mortality.

IV. Economic Choices and Alternative Costs

The WANTS > available RESOURCES inequality creates the need for people to organize into community life for two economic purposes: to make decisions and to resolve conflicts. Every process shown in the want-satisfaction chain requires people to make choices, and the decisions create the possibility of conflict (disagreement) over the correct choice.

People have to make four kinds of choices and there is a possibility of conflict over each choice. The four choices are 1) WHAT to produce, 2) HOW to produce it, 3) HOW MUCH to produce, and 4) TO WHOM shall the product go for consumption. If the greatest possible amount of want-satisfying outputs are to be produced from the available resources, the decisions must be wise (efficient). The efficient decision involves a choice between alternatives. Almost any scarce resource can be used in many different ways--it has ALTERNATIVE USES. If a decision is made to use a resource in one way, the cost of that decision can be expressed as the output or satisfaction from any one of the other uses of the resource.

The idea that the real cost of using up a scarce resource can be so expressed leads economists to discuss the efficiency of an economic choice in terms of ALTERNATIVE COSTS. An ALTERNATIVE COST of using any scarce resource oneway is the amount of something else which could have been obtained from the same amount of the resource. For instance, an alternative cost of using steel to make buildings is the number of cars which could have been produced with the same amount of steel, or the number of refrigerators of T.V. sets. An efficient decision is one for which the satisfaction from the use of the resource is greater than the satisfaction which would be obtained from any other possible use.

Choices about Consumption: Demand Decisions. In terms of the discussion above, choices about what to consume are related to decisions about "what" outputs to produce. If a person wants to get maximum satisfaction from the resources available to him, he must know what is most important to him. This means he sets priorities--the first things first. If he has a limited income, he must be selective about which things he wants above all others, because every time he buys one thing, he gives up spending that money on something else. To put it in terms of alternative costs, the real cost of having one thing is the pleasure given up from not spending the money on something else.

This real cost is the ALTERNATIVE COST. If a person spends all his time building hot-rods, he must sacrifice an opportunity to participate in other activities. In this example. the alternative cost of doing homework or dancing, hiking or earning money by selling shoes is building hot-rods. It is a harsh economic reality that a person cannot have everything he wants, and therefore, must make selections to get what he wants most.

Choices about Production: Supply. These are the "how" choices discussed above. Societies can reduce problems of scarcity by the way they organize production. The possibilities of more efficient uses of scarce resources induced our ancestors to walk on two legs instead of four, invent language, use their thumbs and develop their powers of reasoning, thereby creating a human culture. The striving for efficiency has produced the great revolutions in man's economic life--the invention of agriculture, the discovery and use of metals, the industrial revolution, the rise of industrial society, and our own electronic and nuclear age. Today, with the great advances in technical knowledge and skill, many foresee the day when we will eliminate the scarcity problem completely, a time when there will be no scarce resources because men will be able to satisfy all human wants.

All technical advances in production represent a very simple-sounding achievement, and increase in the amount of satisfaction derived from using a certain amount of input. A good example of this is electronic miniturization. Today we can carry radios and walkie-talkies in our pockets that are more efficient sound receivers and transmitters than devicesthat weighed 50 to 100 pounds only 20 years ago.

Choices about Distribution: The Interaction of SUPPLY AND DEMAND. These are the "for whom" questions. We as individuals or as members of a group can often alleviate our scarcity problems through distribution of what is produced. A father may give his son a partnership in the family-run business and thereby a share of the business profits. Robin Hood stole from the rich to give to the poor. There are more general forms of redistribution which affect the total society. Here in the United States, income is redistributed through the graduated-income tax whereby high-income earners pay a larger percentage of their incomes in taxes than do low-income persons. Then the government uses some of the tax revenue to give outright grants or subsidies to businesses, to schools, to veterans, and to some groups of the poor. Revolutions often result in income and wealth redistribution. After the American Revolution, plantations and estates belonging to Tories were given to patriots. More recently, after the Mexican Revolution, oil properties held by American business firms were taken over and are now operated by the Mexican government as nationalized industries.

To summarize, all the what, how, how much and for whom decisions determine how the want-satisfaction chain works in a particular society--what and how things are produced, distributed and consumed to satisfy (temporarily) people's wants. Each decision to use something scarce has an alternative cost. Producing seven million cars means that we cannot use the necessary inputs to make other things. The cost of producing them with gasoline engines is not using electric motors. The people who buy the cars cannot use the money spent on the car on something else. All of these decisions, taken together, affect us individually and as a society. Ther person who invented the adage that nothing in this world is free must have been an economist!

Non-economic Choices. There is a totally different approach to the scarcity dilemma: we can want less. In some societies, not to want is recognized as a spiritual value. Such a philosophy teaches us that people can willingly choose to limit their wants. In the United States, there are people who, out of conviction, do not set as their goal the amassing of more things. For most of us, perhaps, such behavior is more understandable when the motivation is a religious one, when, through faith, people make a virtue of denial. Wanting less involves a change in human nature rather than a change in the use of resources, and it is, therefore, not usually dealt with by economists.

Economics is primarily concerned with studying the resource side of the WANT > available RESOURCES inequality. Accepting the fact that people have certain wants and that, for most people at most times, wants are greater than available resources, the economic problem is to find some way to get greater satisfaction from available resources--either from somehow creating more resources or by making more efficient use of those which exist.

VI. Resolving Economic Conflict

It is possible that as our society becomes richer and more accustomed to affluence, that people will become more satisfied with what they have, so that scarcity problems will not be considered very important, either to most individuals or to the society as a whole. A look at the daily paper should convince you that we have not yet reached this state of mind. Until that time, economic conflict will be a major part of economic life. There will continue to be disagreements over the right answers to the questions raised earlier: what wants are to be satisfied, how the resources are to be used, for whom to produce output.

It is this conflict over scarce resources that makes up the theme of many stories and movies. Take for instance, the classic love triangle about which boy will get the girl, or the struggle between cowboys and farmers for a watered valley. In its broadest sense, conflict means that people differ sharply, passionately, about ideas, interests and methods.

Because scarcity creates the true triangle--two humans trying to get the use of a scarce resource--the existence of economic conflict should be accepted as one of the facts of life. Nevertheless, open conflict can be avoided, and there can be effective methods of settling the disputes which do arise.

It is to resolve scarcity problems peacefully that people establish rules and methods to reduce conflicts and to settle disputes. We can see this in any group of people. Within a family there are rules for who washes the dishes, or, the family decides by discussion when to take a vacation and where to go.

In the United States, market bargaining and democratic political decision making are two important general ways of reducing conflict and settling disputes. By market bargaining we mean the bargaining which goes on when you buy something from someone else. You may think that you don't have much chance to bargain when you go to the store to buy a tube of toothpaste, but you do have the right to decide where to go, and you can refuse to buy if the price is too high. Your bargaining ability is more apparent when you buy something expensive, like a car. Here you do bargain with the salesman to get the best "deal" possible for yourself.

In the democratic political process many economic disputes are avoided or settled. State legislatures and Congress pass laws regulating economic activity--for instance, it is illegal to misrepresent the ingredients included in canned food. Courts are set up to settle economic disputes over the use of property or the meaning of a contractual agreement between two persons. The preamble to our constitution states the goals of the American Republic. "We the People of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America." Section 8 of the constitution then sets out all of the specific powers of the United States Congress in providing for the stated goals and concludes by saying that Congress has the power "to make all laws which shall be necessary and proper for carrying into execution the foregoing powers. . . ."

In carrying out the purposes of the constitution, Congress, the President, and the courts must necessarily concern themselves with our economic welfare. Our economic system is based on private ownership of property, in particular of the means of production, so the government must necessarily concern itself with the problems and needs of business, and the same thing holds true for state and local government. Consequently, all levels of government provide a wide range of services to business. Most of the mail handled by the Postal System is business mail. The Department of Commerce provides statistical and reporting services that are vital to many businesses, and the Department of Agriculture serves the agriculture industry. There is no aspect of our economy which is not touched by the hand of government and all of this government activity is justified by the constitutional goal or promoting the general welfare. Whether or not the government activity actually does promote the general welfare is a subject of constant dispute but that is but another realm of conflict which the government must adjudicate.

VII. Non-Economic Conflict

Economic conflicts are only one kind of the many conflicts with which our society is constantly faced. For example, there is a political conflict over United States policy toward other countries--should the United States protect the world against Communist expansion or should we reach an accomodation with Russia and China. Should 18-year olds have the right to vote, should churches be free from paying income taxes, should the Negro civil rights movement press for integration or Black Power? Each of these conflicts has an economic aspect and can be subjected to economic analysis but all of them are primarily political and social conflicts.

VIII. Economic Organization of Society

ECONOMICS can be defined as a science which studies how people, acting in groups, make economic decisions. It should now be clear that economic decisions are choices about how to use scarce resources in order to satisfy our wants. In the following chapters we will continue to elaborate on this definition, particularly on the matter of how people organize into groups to make economic decisions. The way groups organize in any particular society to carry out economic activities determines the nature of that economy. For example, one of the kinds of economic groups we have in the United States is the private business firm. These interact with each other by buying and selling in markets. In Russia, however, there are no private business firms and the economy operates with very few markets.

In the United States, families, businesses, labor unions, government agencies act as economic groups because they make economic choices and are involved in the production, distribution and consumption activities described in the want-satisfaction chain. All of these economic organizations of people, taken together, form our ECONOMY or ECONOMIC SYSTEM.

In the chapters which follow, you will study how economic activities are organized in the United States and compare our own methods of dealing with scarcity with those developed in other countries. The objectives are to learn enough about the United States economy and other important economies (such as the Russian) to enable you to study the important economic problems of the day, and to try to find alternative solutions to them. These problems are familiar to you, and each can be seen as a disagreement about how best to use scarce resources.

UNIT I
LESSON 2

CHAPTER 2

ORGANIZING PRODUCTION

I. Economic Growth and Economics

Economic well-being depends upon economic growth, and the history of our own country can be viewed as a fantastic triumph over the scarcity condition. The Pilgrims scratched rocky soil for a return that was hardly enough to keep them alive, and today Americans, on the average, have the highest standard of living in the world.

This great economic advance was affected by many conditions peculiar to America, conditions which are probably already familiar to you. It is not our desire here to offer a complete theory explaining the economic growth of the U.S. economy; however, we can list some of these conditions to indicate the many forces which created the industrial giant which the United States is today. America had and has great resources in agricultural land, mineral ores, and forests. Generally, the American people have been characterized as being vigorous and hard working. For most of our national life we have revered the protestant ethic of frugality and accumulating for a rainy day, of the value of hard work and self-reliance. Adequate sources of cheap labor existed throughout the nineteenth century in slaves and the waves of immigrant European workers. Throughout the nineteenth century federal state and local governments followed economic policies supportive of business. These policies permitted business to expand and to become concentrated in large industrial complexes. The policies were exemplified in our protective tariff policies, government distribution of public lands, government taxation policy, and the general government laissez faire philosophy toward the control of business (that the government should place minimal restrictions on business behavior over-and-above protecting private property and the enforcement of the contracts).

The expansion of the United States from the Atlantic to the Pacific took only sixty years (1790-1850) and that was before the railroad age. During the period from 1790 to 1860, most of the land was brought into use for industry, agriculture, mining or forestry. East of the Mississippi, a transportation network of canals and railroads was built, and great cities based on industry and commerce had grown up.

The Civil War slowed economic growth, but after 1864 there began a period of very rapid growth. By 1914, the United States economy was the largest in the world and the American people were the richest in the world. Since that time, U.S. industry has continued to grow until today the U.S. industrial system produces 40% of the world's industrial products. The fact that this great output is consumed by only 7% of the world's population gives a good indication of how high our standard of living is.

Even though throughout history people have worked to find ways of improving their conditions, it wasn't until the first half of the 18th century that curious men began to ask fundamental questions about the way a society carried on its economic activities. They wanted to know why things cost what they did, why prices changed, why products were sometimes cheap and sometimes costly, why money was sometimes plentiful and at other times scarce. The big question behind all of these small questions was the question of why some countries were rich and others poor. What were the principles underlying the process of growing wealth and what could governments do to increase the wealth of a country?

This first attempt at a complete answer came in 1776 when Adam Smith published The Wealth of Nations. This book set forth the principles governing the process of economic growth, and began a revolution in the way people thought about society. It served as the starting point for future generations of economists who lived under different conditions, but who were all trying to discover the key to economic growth. It was the beginning of economics.

The central concern of this course is much the same as that which concerned Adam Smith--what makes societies grow, how are economic activities organized, and what alternative policies are available for governments to follow so that the material well being of the people will be improved continually.

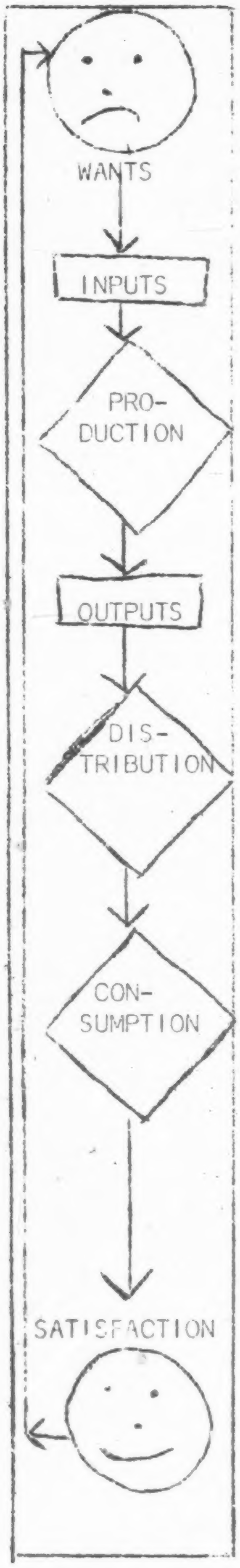
The concentration of this course will be upon our own economy, but the economic problems that face all Americans extend beyond the limits of our own country. In order to understand both the areas of conflict and cooperation with the communist world, we must understand how those countries organize their economies on the basis of a vast economic plan--they are called Planned Economies. Much of the economic knowledge which the advanced nations, such as our own, have acquired can be used to help the underdeveloped nations. We can better understand these problems of development by using the economic knowledge gained in studying our own economy.

To say that an economy grows is just another way of saying that more and more is produced for every person. Growth means a higher income per person or, another way to say the same thing, more output per person. Increases in production come from two things: 1) the creation of new or more resources, and 2) increased efficiency in using these resources. In order to understand why an economy grows, we must first understand the production process.

II. The Production Process: Inputs and Outputs

In the previous chapter we stated that, from an economist's view, a society serves two main functions: 1) it organizes production, distribution and consumption in order to satisfy the wants of the people; and 2) it organizes ways to resolve conflicts over the decisions governing the use of scarce resources--decisions on production, distribution and consumption.

The previous chapter briefly illustrated how resources (inputs) are put through a production process and converted into the outputs that people need. Production, distribution and consumption of all the output involves many operations which use up both time and resources. Now it is time to look more closely at the production process to uncover the basis for economic growth. This inquiry requires us to define production activities more carefully. First, let's look at what the inputs and outputs of production are. Here are the definitions you need in order to understand these terms.



INPUTS

1)	Natural Resources	2)	Capital Resources
	Human (labor)		Human (training & education)
	Non-human		Non-human

OUTPUTS

Goods
Services

Here are the definitions you need in order to understand these terms:

INPUTS- The resource services which are used up in production making up the factors of production.

They are either Natural Resources or Capital Resources.

Natural Resources:

Non-human: The inputs are services of 1) all land, water, air in its natural state 2) all elements and chemical compounds in the land, sea, and air in their natural state 3) all plant and animal life in a natural state.

Human: (labor) man's own services, the natural productive energies, physical and mental.

Capital Resources:

Non-human: 1) all improvements of land -- roads, dams, fences, crops, dometic animals, etc. 2) all tools, machines and buildings. Non-human capital includes the things we use to produce things to consume. Capital resources are not consumed directly but are used up in the production process.

Human: All improvements in natural human resources (labor) resulting from training or education.

OUTPUTS- The Goods and Services resulting from Production.

Goods- All tangible articles which people consume-- shoes, hamburgers, cars, clothes, etc.

Services- All intangible things which people consume-- haircuts, visits to the doctor, use of a computer, baseball games, TV shows. A service, whether from a man or a machine, is always consumed at the same time that it is produced, therefore, services cannot be stored up. This is what distinguishes services from goods.

PRODUCTION is an activity which combines inputs to produce outputs. Outputs, in the form of consumer goods & services, are then distributed to people for consumption, or they are capital goods and services used to produce other outputs.

The want-satisfaction chain describes the economic processes of every society. In primitive societies, the chain is very simple because a few people organized into small groups can carry out all the processes necessary to satisfy their own wants. They are self sufficient.

In an economy like our own, the chain is very complex and most of it is hidden from view. Much of production activity in our economy involves producing capital goods other than things for final consumption. Furthermore, materials used to produce final output must be grown or extracted from the land, and processed before they are ready for fabrication into breakfast cereals, cosmetics, pop records, airplanes, etc. This necessity of putting resources through several stages of production before the final product is produced is called ROUND-ABOUT PRODUCTION.

We seldom see the production of most of the goods and many of the services we consume: and most people are unaware of the extent of ROUND-ABOUT-PRODUCTION. In our economy the parts of the chain between wants and satisfaction which are most visible are certain parts of distribution and consumption. However, the degree of complexity of economic organization--the degrees of round-about-production--in an industrialized society such as our own, is directly related to the ability to make more efficient or productive use of resources. The readings accompanying this lesson illustrate why mass production techniques require complex forms of business organization.

III. RESOURCE PRODUCTIVITY
(Production Efficiency)

In the United States we have efficient factories, transportation and telephone systems, department stores, homes. Even housewives make efficient use of their most important resources, their own labor, by cooking on electric or gas stoves and using automatic appliances. But what is efficiency? Managers who run U.S. business and the women who run the households are involved in making efficient economic decisions about production methods. They make the "how" decisions by choosing between different inputs or by choosing between alternative ways of producing something. The most EFFICIENT production process is the process which gives the most output for the available input.

PRODUCTIVITY RATIOS (input/output) are used to figure which process is the best. They measure the efficiency of using a particular input to produce a particular output. If a secretary can type twenty business forms in an eight-hour day on a standard typewriter and thirty on an electric typewriter, she is more efficient using the electric typewriter. Her productivity ratio using the regular typewriter is 20 business forms per 8 hour day (20/8), or 2 1/2 per hour, and using the electric typewriter is 30/8, or 3 1/4 business forms per hour. Her employer will be wise to buy the elctric typewriter if it lowers the cost of producing business forms.

Often the problem is not simply a choice between one or two inputs. When there are many inputs, before any statement about the efficiency of a production process can be made, it is necessary to be able to compare combinations of inputs. For instance, in the auto industry, the assorted inputs may be measured in such varied quantities as man-hours, tons, shiploads, computer hours, and so on. If a Ford executive wants to compare the production efficiency of two assembly plants, he needs a way of comparing the inputs of each plant. He lists each input in terms of cost (so many dollars worth of steel per car; so many dollars in labor), and by adding the cost of all the inputs, he finds the total cost of producing a certain number of cars. If the production efficiency of Plant A is $2100 per car, and that of Plant B is $2310 for a comparable car, Plant A is obviously more efficient.

IV. INCREASING PRODUCTIVITY THROUGH SPECIALIZATION

Economic growth results from increasing productivity, but what permits us to increase productivity, how does it come about? We already have a clue to the basis for increasing productivity. In the discussion of inputs we categorized resources according to natural resources and man-made resources or capital. The use of capital is one form of specialized production, and it is through the SPECIALIZATION OF PRODUCTION that resource productivity is increased.

Generally speaking we can identify two broad kinds of specialization: RESOURCE SPECIALIZATION and DIVISION OF LABOR. Use of capital in production is just a form of resource specialization-- the creation of special equipment, buildings, or people to perform special productive service. Other examples of resource specialization include, for example, the use of land in Florida for growing citrus fruits instead of grapes, the use of doctors to provide medical service rather than to paint houses, the use of a coliseum for sports events rather than for grand opera. Resource specialization simply means using natural or human resources or capital for some kind of productive activity for which the resource is particularly well suited.

To use inputs for special purposes is to recognize that factors of production are not perfect substitutes for each other--good mechanics aren't necessarily good bookkeepers; acres of land good for growing wheat may not be adequate for grazing cattle, and locating a canning factory far from where the product is grown would be inefficient.

One can also increase the efficiency of production through the DIVISION OF LABOR, specializing the use of labor in a given production process. Division of labor or process specialization means the breaking up of a production process into its component operations, each of which is performed by a different person who becomes a specialist in that operation. Often these steps can be made very simple, thereby allowing mass production using unskilled labor. The advantages gained by division of labor are illustrated in Adam Smith's classic description of the organization of a pin factory.

> "...a workman not educated to this business, nor acquainted with the use of the machinery employed in it,...could scarce, perhaps with his utmost industry, make one pin in a day, and certainly could not make twenty. But in the way in which this business is now divided into a number of branches, of which the greater part are likewise peculiar trades, one man draws out the wire, another straightens it, a third cuts it, a fourth points it, a fifth grinds it at the top for receiving the head; to make the head requires two or three distinct operations; to put it on is a

> peculiar business, to whiten the pins is another; it is even a trade by itself to put them into the paper; and the important business of making it in this manner, divided into about eighteen distinct operations, which, in some manufactories, are all performed by distinct hands, though in others the same man will sometimes perform two or three of them. I have seen a small manufactory of this kind where ten men only were employed, and where some of them consequently performed two or three distinct operations. But though they were very poor, and therefore but indifferently exerted themselves, ma among them about twelve pounds of pins in a day. There are in a pound upward of four thousand pins of middling size. Those ten persons, therefore, could make among them upwards of forty-eight thousand pins in a day. Each person, therefore, making a tenth part of forty-eight thousand pins, might be considered as making four thousand eight hundred pins in a day. But if they had all wrought separately and independently and without any of them having been educated to this peculiar business, they certainly could not each of them have made twenty, perhaps not one pin in a day..."

Today, exactly the same principles are applied to the manufacture of highly complex automobiles and television sets. However, the manufacture of complicated devices requires equally complicated capital goods and special methods of production. The invention and use of specialized capital goods, such as complex power tools, computers and automated factories adds enormously to the efficiency of production. A worker may only have to press a button or move a lever at the appropriate time to make a machine (a capital good) perform a complex operation. In turn, such machines make necessary new specialized inputs, inputs such as engineers to design a machine that can make other machines.

The development of entire specialized industries to serve other industries is another form of specialization and characterizes ROUND-ABOUT-PRODUCTION. Resources are not converted directly into final goods for use but are used to produce capital goods, and the capital goods are then used to produce consumer goods. To get some ideas of the importance of industries which produce materials for further processing (like construction materials, textiles, chemicals) and capital equipment look at the kinds of industries and their relative size by referring to the tables in part of the statistical appendix at the back of the text.

To produce an automobile, it is necessary for other businesses to produce the huge stamping machines, intricate computers and conveyers. To make aluminum frying pans, the aluminum must go through several production processes -- STAGES OF PRODUCTION. In stage one, bauxite (the ore from which aluminum is extracted) is mined; In stage two, the bauxite is refined into alumina, a powdery, white aluminum oxide; In stage three, this is smelted by an electrolytic process into aluminum ore; but that's not the end. In the fourth stage, the aluminum ingots are rolled into aluminum sheets; and, finally, in stage five, we get aluminum pots.

V. THE LAW OF DIMINISHING RETURNS

The preceding analysis may lead you to assume that, despite the psychological nature of wants, modern technology can, or will soon, eliminate the scarcity dilemma. Unfcrtunatley, there are limits to increasing the efficiency of available resources. THE LAW OF DIMINISHING RETURNS states this hard fact: any production process which combines two or more factors of production, one of which is fixed in amount, eventually will show diminishing returns from the increased use of other inputs.

An example may clarify the meaning of the law. A garment factory is producing pants. The size of the building is fixed; the normal production calls for fifty employees, as many as the building will contain in reasonable comfort for efficient use of the machinery. Can the owner keep increasing production by increasing the size of his labor force? If he doubles the number of people in the building without changing anything else, it may be difficult to find jobs for everyone, and workers may get in each other's way. Total production will probably increase, but the added output per new worker is likely to be less. Let's up the number of workers to 200; they will be so crowded that they can barely move; production may even dip below that obtained with the original 50.

Here one factor of production (the size of the building) was fixed. Each new worker brings about a smaller increase in output. The Law of Diminishing Returns says that increasing the other factors (amount of labor, and number of machines, materials, etc.) will eventually lead to diminishing returns--the added units of input will yield less and less additional output.

We have pointed out how men have been increasingly successful in using specialization to augment resource productivity. It would seem logical to assume that society could figure a way out of the scarcity dilemma by increasing production instead of limiting wants. However, the Law of Diminishing Returns limits our ability to eliminate the physical bottlenecks regardless of our efforts, ingenuity and inventiveness. Diminishing returns is not a theory, it is a law.

UNIT I
LESSON 3

CHAPTER 3
EXCHANGE, MONEY, CREDIT AND CAPITAL

Students can reasonably ask why money isn't mentioned until Chapter 3 when it is such an important part of economics. The answer lies in the fact that economics is primarily concerned with the real economy--the activities of producing and consuming goods and services to satisfy wants.

Money is real and necessary, but its importance comes from its use in buying the things we want; and money is necessary because of the existence of specialized production. With specialization a man who works for his living produces only one or a few things, often just a small part of the total work of making something. He does not make for himself the variety of articles necessary to satisfy directly his own needs and desires. He is dependent on trade or some other means of distribution for two reasons: to produce goods and services for trade so that he can earn money, and to buy what he wants. He works to earn a salary, money which he then spends on things like clothing, food, shelter, entertainment.

In a society like ours, people become more and more dependent on one another to supply the goods and services needed for survival as well as for comfort and pleasure. As people become more productive, they become less self sufficient; they forego independence for a higher standard of living. In the U.S. we are no longer the self-reliant and self-sufficient pioneers who founded and settled this country. Most of the goods and services which are necessary for our survival are produced by thousands of different people and made available to us by means of a complex and highly specialized distribution system. Each of us is dependent on thousands of people, most of whom we never know or see. And the more efficient the society becomes, the greater the volume of trade that is necessary to complete the want-satisfaction chain.

Thus, with specialization comes interdependence and the necessity to trade and use money. This chapter will be devoted to looking at what money is and how money and credit make possible the many exchanges required by a complex economy. We will study the needs for money and credit to finance buying and selling connected with consumption, production and capital and wealth accumulation with economic growth.

II. MONEY: ITS FUNCTION, FORM AND NECESSARY QUALITIES

EXCHANGE, trade of one thing for another by two or more people, is a means of distributing the output of specialized production. BARTER, the exchange of one good for another, remains the major form of exchange in some small societies, but it is not efficient for us in the United States. MONEY EXCHANGE, trading money for a good or service, is essential in our society. Imagine, for example, a man who makes crankcases for automobiles trying to barter a crankcase for food. He could starve to death while looking for someone willing to accept his crankcase in exchange for the amount of food he wanted. Or, if he takes his wife out to dinner, how much should he pay for the meal: Was it worth one half the crankcase? And what would the restaurant owner do with half a crankcase? But if the crankcase maker exchanges his labor services for money, he can then exchange the money for whatever goods and services he needs or wants.

MONEY is defined, not by what it looks like or is made of, but by what it does. Anything can be money if it serves the functions of money and money functions in three ways. Most important, money serves as a MEDIUM OF EXCHANGE: it is something which sellers generally accept as payment for buying goods or services. In this country you can use cash or checks to buy groceries or clothes or baseball tickets. Money is also a STANDARD OF VALUE or UNIT OF ACCOUNT; all goods and services which are for sale have a market value which is stated in dollars and cents. These dollar prices inform buyers and sellers about the value of the item up for sale; the dollar price is also used to record sales to keep account of the amount of the purchases. Thus, a family might keep account of their monthly expenses--$150 for rent, $75 for car payment, $100 for food, etc., for a total of $600 for the month. Finally, money is also a STORE OF VALUE; people can store their wealth by saving money and keeping it in a safe place. Because money is used as a medium of exchange, it is something of value to most people; therefore, it is a safe way to store wealth. If you have $5000 in a savings account, you can always withdraw the money and use it.

Things which serve as money can have any or all of these three functions. For example, the guinea in England is a unit of account but is neither a medium of exhange nor store of value. There are no coin or paper guineas--a guinea is simply a name for 21 shillings (the pound, which is another English unit of account is 20 shillings). People write checks in guineas but the banks cash them for pounds and shillings. Shop windows show dresses priced in guineas, but you pay for the dress in pounds and shillings if you do not write a check. Four hundred years ago in England there were coins called guineas but there were no coin or paper pounds. Then, the pound functioned only as the unit of account; all other money was valued in terms of how much it was worth in pounds and all accounts were kept in pounds. Another exotic example is the use of stone money on the island of Yap in the Easter Islands. Great stone statues are stores of value but they are not used for exchange nor as units of account.

In most modern economies there are things which are defined as money but which serve only one or two of the three functions. Furthermore there are things which are not defined as money which serve as money for some purposes. Credit cards, for example, serve as a medium of exchange but there are not considered as part of our money supply.

The need for money, how it comes into existence and what things can serve as money, are illustrated by the experience of men in the German prisoner-of-war camps during World War II. The Allied prisoners used cigarettes as currency. Cigarettes were exchanged for goods (spam, candy, soap, chewing gum), services (washing a shirt, mending trousers), and in gambling transactions. All prices were in terms of so many cigarettes, and some prisoners hoarded them, accumulating wealth. Cigarettes served well as money: they were uniform, reasonably durable and of convenient size. But using them as money in the prison camp had its financial ups and downs: with each Red Cross shipment of cigarettes, their value as money went down, but as they were smoked, and again became scarce, their value in terms of purchasing power went up. They could also be stored for a considerable length of time--until liberation day. One cigarette millionaire had a couple of foot-lockers under his bunk filled with stale cigarettes when the American Army broke down the barbed-wire gates of Stalag VII-A.

Money can be anything that has acceptance among its users to make the exchange of goods and services more efficient. Even though money can be anything (stones, cigarettes), it must have certain qualities. In order to serve its three functions, money must be scarce. Money can be made out of anything which is naturally scarce, such as gold, or cigarettes in a prison camp, or scarce because of the high cost of production, such as the carved stones of Yap, or scarce because its creation is controlled, as governments usually control the money supply (that is why the governments must put counterfeiters out of the "business" of printing paper money). Somehow, money must be scarce, and it must be accepted by the whole society as a medium of exchange.

Money, throughout history, has had many forms and it has changed to meet the needs of exchange. The change in the nature of the English guinea and pound, as described above, are good example of this. In our own economy, the money supply is defined officially (by the Federal Reserve statisticians) as the sum of all currency, paper and coins (strictly regulated by the Federal Government) and checking deposits (also regulated by government agencies). Checking accounts (demand deposits) at a bank are money, because checks are a medium of exchange, and the bank account is a store of value.

The United States money supply , by and large, serves the three functions stated above. As a MEDIUM OF EXCHANGE, it can be used to buy anything. Paper currency and coin are legal tender and therefore are accepted in all transactions. Personal checks, too, have almost this degree of acceptability. The dollar is also a UNIT OF ACCOUNT: the worth of every product or service is measured in dollars and cents, not in crankcases, or chickens or shirts. Lastly, money is also a STORE OF VALUE. Because the dollars received today for wages can be put aside and spent at some later time, money is a convenient way to store wealth. As a store of value, paper money or a bank account are more convenient than silver dollars.

Today, the needs of exchange have made checks the most important form of money and this has almost created a reality of what "Odd Bodkins," the cartoon character, satirizes in this strip.

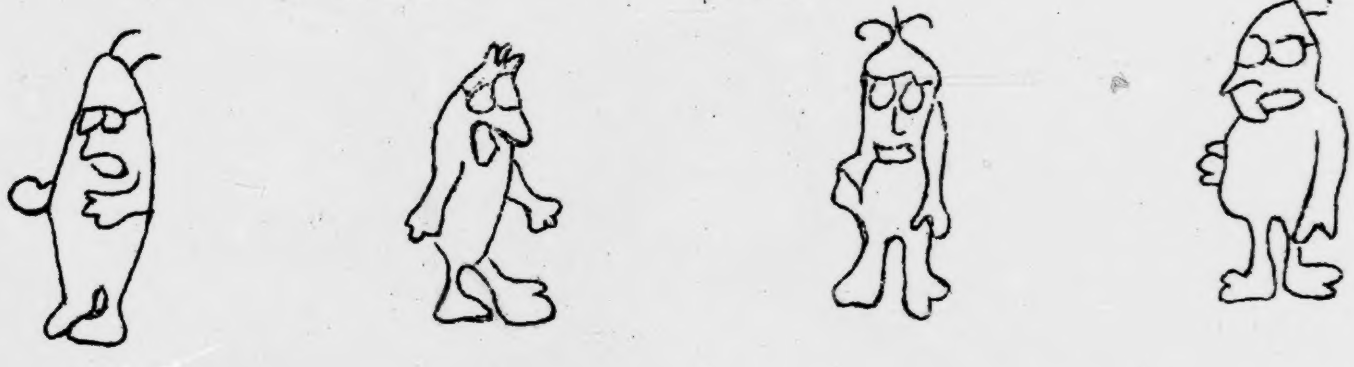
*

. . .It starts when your boss gives you a piece of paper with some numbers written on it.

. . .You send the paper to the bank and they record it, and give you a pad of paper to play with.

. . .If you want something from someone, you pay for it by writing numbers on this pad and giving him the top piece.

. . .When you think about it, there is really no such thing as money. . . .



---

* "Odd Bodkins," The San Francisco Chronicle

In the not too distant future, even checks may seem old-fashioned because we will almost certainly develop computerized money. Each of us might have a bank account and a credit card but very little cash: our exchanges would be recorded and our bank account balanced by a computer. When you receive money from salaries or the sale of something, the transaction would be entered as a debit. For example, a clerk in a store will ring up a sale together with the customer's account number. This information would be fed into a computer so that the cash register would print a sales slip showing the price of the sale and the new balance in the customer's account. When an account is overdrawn, an automatic loan would be made for people with good credit. All but a few transactions would be carried out with credit cards and the computer would record every transaction. When this time comes, money will become, very largely, an abstraction. It will no longer be a physical object you can point to.

Another example will illustrate the effect of the coming change. For instance, in this new cashless society, when you buy a new suit say for $65.95, you will pay for it, not with $65.95, but by handing over your credit card which is used to record the sale. Your bank will be notified of the sale and will reduce your bank deposit, reducing your store of value. The three functions of medium of exchange, unit of account, and store of value which our money now performs will still be performed but by different things. The dollar still will be the unit of account, but the credit card will be the principal medium of exchange, while the balance in your bank account will be your principal store of monetary value.

III. MONEY AND GOLD

Although the United States has one of the world's most sophisticated money and credit systems, many Americans still believe the monetary system should be based on gold and silver. It is not unusual to find people who are firmly convinced that every dollar is backed by gold in Fort Knox and everytime we buy something from a foreign country that we have to send gold to pay for it.

This attachment to gold might seem strange when one considers that gold coins have not circulated for thirty-five years and that almost all of our exchanges are made with paper money and checks. However, we should perhaps be more tolerant because mankind has used gold and silver for money for many centuries and only during the past hundred years have gold and silver coins slowly disappeared from circulation.

Gold and silver coins are the victims of technology. Until the use of paper money and checks, there was good reason to rely on gold and silver. These metals were naturally scarce and impossible to create by man-made means (this, of course, was the object of much experimentation during the middle ages when alchemists searched for the chemical secret which would permit them to turn base metals into gold and silver). Gold and silver had value anywhere in the known world--as good as gold expressed a real truth.

The nineteenth century was a period of transition from gold and silver coined money to paper money, and during this period there was good reason for trusting the value of gold and silver coin over the existing paper currency. Paper money was issued by two sources, both sometimes unreliable. A major source of paper money was commercial banks, which, in the 19th century issued bank notes instead of check books to depositors. Banks carried on their business by accepting deposits from customers and using these deposits as the basis for lending paper money to borrowers. These borrowers received their loan in the form of bank notes, IOU's from the bank promising to pay the holder of the note in gold or silver coin. In the 19th century business, including banking, was frought with risks in this country. Banks went out of business as fast as now banks come into existence. Shop keepers and others were not usually as willing to accept paper money, bank notes, as payment for a purchase unless they discounted their value, accepted them at a certain percentage of their value; discounting a $10.00 note at 10% meant accepting it as worth $9.00. Under these circumstances, paper money literally was less valuable than gold and silver coin.

The other source of paper money, governments, also used monetary practices which devalued paper money in the eyes of the public. Governments issued paper currency in times of crisis when they had an inadequate command over gold and silver, for instance, to finance wars. Often this paper money, not backed by gold or silver, was issued in such large amounts that it soon lost its value. Inflation, rising prices, followed in the wake of the government use of paper currency, and the inflation reduced the value of the paper currency, causing some people to suffer economically through no fault of their own. Our history includes examples of the fiscal misuse of the printing press by the government. During the colonial period such practices were common; our national government did the same thing during the War for American Independence and during the Civil War.

These practices of banks and government naturally had their effects on the public who demanded safe and sound money--money whose supply is controlled in some way to avoid the risks of unsound money. But today we live in an economic system too large and complex to be operated with gold and silver coins. In this country, at the present time gold is monopolized by the U.S. Treasury (only certain licensed persons are permitted to buy and sell gold). Gold and silver bullion (bars) is used to back portions of paper currency. The silver bullion backs the approximate $602 million in silver certificates issued by the U.S. Treasury which circulate as part of our currency. Most of the rest of the paper currency is in Federal Reserve Notes and it is required by law that gold in the amount of at least 25% of the Federal Reserve can issue. It is one way to make money scarce. However, the Treasury has always had enough gold to permit the Federal Reserve to increase the supply of Federal Reserve notes by 50 to 200%. It is the Federal Reserve system which has limited the amount of paper money in existence, not the necessity of backing paper money with gold.

We can summarize this discussion by restating that money can be anything which serves as a medium of exchange, standard of value, and store of value. There is no necessary reason to tie money to gold or silver. What is essential is that whatever form money takes, that it be generally accepted in exchange and that it remain scarce relative to the things one buys with it.

IV. PURCHASING POWER--INCOME, CREDIT AND WEALTH

In our society, in which almost everything is bought with and sold for money, our existence depends upon having a command over money PURCHASING POWER.

We can get this purchasing power by 1) earning an income, 2) using credit, (borrowing money or buying on credit), 3) selling an asset, 4) receiving a transfer payment from an individual or a government agency (money from home, welfare payments, social security, interest payments). Businesses also must have a flow of purchasing power. A firm sells its output and uses the money receipts to pay income to people who supply inputs. Firms can also buy through borrowing (credit); finally, they may receive transfer payments.

Income

INCOME is defined as that flow of purchasing power which comes to us as a result of our providing productive services over a period of time. Income can be earned in four ways: 1) wages or salary, 2) rent, 3) interest, and 4) profits. Wages and salaries are paid for labor services. WAGES refer to payments for work done at an hourly or weekly rate, and SALARIES are paid for work done at a monthly or yearly rate. RENT is any payment for use of land, building, or equipment. For example, farmers rent land and Columbia University rents the land under Rockerfeller Center in New York City for $3,800,000 a year. Rent for buildings can be paid for a house, a factory, an office building or a single office, and people rent equipment ranging all the way from a $5 pipe wrench to a $5,000,000 computer. INTEREST is income received for loaning money. Interest rates can be expressed in annual rates (10% per year) or in monthly rates (1 1/2% per month). Lastly, PROFITS are the earnings received by the owners of a business, and they are the difference between total costs and total revenues. For example, annual total costs of a barbershop operated only by the owner would consist of rent on the building, pay on all equipment, cost of supplies, and payment of a salary to the owner equal to that which would have to be paid to another barber to operate the shop. Total revenue would consist of income from the sale of goods and the barber's services. The annual profit would be any difference left after total costs had been subtracted from total revenue.

Credit

CREDIT is simply the ability to borrow money or otherwise obtain purchasing power when you do not have money. This can be in the form of money or it can be the right to buy certain goods or services with the privilege of paying for them later.

Because money is scarce, and because income and wealth are unevenly distributed, some people have more money than they want to use, and other people have less. Those who have less may try to borrow; those who have more usually want to lend so that they can earn additional income. By permitting borrowers to use money that would otherwise remain idle, purchasing power can be expanded. Most lending is done by banks and savings and loan associations. Because people who deposit money in these institutions practically never want their money at the same time, the banks and the savings and loan associations lend out all but a small percentage of the deposits. Also, banks can create money by establishing a checking account for the borrower in the amount of the loan. The borrower then is free to write checks on his account. Because depositors do not draw out much of their money in any one day, the bank can lend out much more money than it actually has in cash.

The main money lenders in the United States are financial institutions--commercial banks, finance companies, savings and loan companies, insurance companies and other specialized financial companies. Their willingness to lend money is based on how much money they can earn as interest, the duration of the loan, and the borrower's ability to repay.

Credit has made possible the enormous expansion of the U.S. economy. It provides business firms with money to begin and expand their activities. Credit enables individual families to increase their level of consumption. Thus, credit availability stimulates greater production by increasing purchasing power. Credit, and how it functions, and how it affects the operation of the economy, will be examined more fully in Unit III.

Having credit, the ability to borrow, is almost like having money; but credit and money are not the same because credit is not a store of value. You can't save it up to spend later. Furthermore, credit creates the obligation to repay the loan in money at a later date.

Certain forms of credit are almost as good a medium of exchange as money. Some banks, for example, will furnish almost instant credit for unspecified purposes, or, to take another example, national credit cards allow the purchase of any goods or services from specified firms. This kind of credit provides fairly general purchasing power in that it can be used to obtain money directly or can be used as a limited medium of exchange; but it is not a unit of account, nor is it a store of value. Other kinds of credit--specific loans to buy an automobile or a T.V. set, or credit cards and charge accounts to be used in specific stores--are extended to the borrower for specific purposes and hardly resemble money at all.

Wealth

Wealth is also a source of purchasing power. Wealth is defined as any physical asset which one owns, which has a value, and which can be exchanged. Assets are in many forms--money, stock certificates, property, buildings, jewels, autos, etc. The fact that an asset has a value and can be exchanged means that it can be sold for money and thus give its owner command over purchasing power.

Transfer Payments

Lastly, we can obtain purchasing power through transfer payments. If parents give money to children, or you give money to a friend or someone who stops you on the street it is a transfer payment which provides the person receiving the money with purchasing power.

Most transfer payments come from government agencies. Whenever an individual or a business receives an interest payment on a government bond, or a business receives a subsidy (for example, subsidies to airlines or shipping companies) it is a transfer payment. Whenever a person receives a social security payment, unemployment compensation, workman's compensation, disability, or medical payments it represents a transfer of money not occasioned by any sale of productive services, use of credit, or sale of assets. Insurance companies also make large transfer payments in the form of medical, accident, death, and disability benefits.

V. Financing Round-about Production and Economic Growth, the Process of Capital Accumulation

Capital Accumulation

A growing economy, where the people's standard of living increases from year to year, requires a continual expansion of industry and of the man-made means of production--capital. Every year in the United States there must be more roads, cars, trucks, airplanes, machines, engineers, nurses, trained construction crews. In addition, the present high degree of technology means that firms must raise enormous amounts of money to finance expansion of their production capacity. For instance, the Fairless Works, an integrated steel mill which smelts, refines, rolls and finishes steel products, was built in 1951-52 with a capacity to produce 2.2 million tons of steel a year and was reported to have cost $600 million.[1] In the early 1950's the president of Standard (oil) of Indiana estimated that an oil refinery capable of producing 30,000 barrels of oil a day would cost about $40 million.[2]

This section describes this process of capital accumulation by introducing two additional economic activities--saving and investment--and by outlining how capital accumulation is financed. We want to describe two related groups of activities--the production and expansion of capital and the raising of the money to pay for producing the capital. A major purpose of this discussion will be to acquaint you with the vocabulary used to describe these interrelated activities.

Real and Financial Capital

Capital was defined in chapter two as all man-made factors of production, improvements in both human and non-human natural resources. Human capital is all improvement of labor through training and education. Non-human capital consists of all constructions (buildings, bridges, improvements of land), all tools and equipment, and all business inventories. Inventories are stocks of raw materials, semi-finished or finished products. An electronics equipment manufacturer might have on hand inventories of raw materials (chemicals and metals), semi-finished goods (transistors and vacuum tubes) or finished goods (T.V. and radio sets). all of these inventories are capital because they are improvements in natural resources which have not yet been distributed for consumption.[3]

Measurement of human capital--the training of specialized labor and management--has been excluded because only recently economists have come to recognize that improvements in people are as much capital as improvements of land or other resources. Because the broader meaning of capital is recent, often the word is used in the more restricted sense to include only non-human capital. This is almost always the case in attempts to measure the amount of capital in existence It is much easier to evaluate the dollar value of a building or a machine than the dollar value of a lawyer or carpenter.

---

[1] "The Transformation of U.S. Steel", Fortune, Jan 1956, p. 200.

[2] R. Wilson, Is Big Business Bad? Fact Vs Fiction, 1952, p. 3.

[3] The definition of capital given here includes improvements in both human and non-human resources. This definition is accurate; traditionally, however, capital has been defined to include only non-human capital.

At the outset of this discussion we have to deal with a possible source of confusion. The word capital is used to refer to both the capital goods created and to the money used to pay for the goods. Thus, when U.S. steel decides to build a new steel mill, the company must raise "capital" (money) to pay for the new plant. The corporation goes to the "capital" (money) market and sells stocks or bonds or borrows from some financial institution to raise the necessary amount of money. To avoid confusion over the double use of the word, we will refer to capital as a factor of production as REAL CAPITAL, and to capital as a source of money to finance real capital as FINANCIAL CAPITAL.

Investment and Saving

Real capital is created through the process of saving and investment; in fact, we will see that saving and investment are two sides of a coin which explain how real capital comes into existence.

INVESTMENT is the process of creating real capital. The word refers to the purchase or production of new real capital. If a company invests in a new truck, it purchases a newly produced truck. Investment activity is the production of output which will be used as real capital. In 1966 private investment in the United States equalled $118 billion, or 16% of total production during the year.[1] Thus, the country invested in $118 billion of new real capital. The amount of real capital in existence increased by less than this amount because some of the new capital replaced buildings and equipment which wore out during the year.

Investment requires scarce resources to be reserved from production of consumption goods and services to be used for capital production. The alternative cost of producing new capital in 1966 was the $118 billion of clothes, food, surf boards, etc. which could have been made instead. To the extent that people are unwilling to save resources for investment spending, capital accumulation will be slowed down.

In the U.S. people do not, in fact, spend all of their income on consumption. They save part of income. SAVING is done by families, firms and government and it is defined as that part of current income which is not spent. Saving is not spending current income. For example, if a family earns $10,000 a year and spends $9,000 during the year, it will have saved $1,000 that year. If a corporation's profits after paying out all costs are $10,000,000 and if it pays out $9,000,000 in dividends to stockholders, it will have saved $1,000,000 during the year.

The relation between a person's or family's income and spending on consumption can be expressed by using symbols and an equation.

Let Y = income
S = saving
C = consumption spending
Then $Y = C + S$
or $S = Y - C$

In the above, saving is defined differently from the ordinary use of the term. In economics, saving (S) always refers to unspent income during the present time period; it always means the difference between current income (Y) and current spending on consumption (C). It never refers to savings in a bank account or savings in the form of stocks or bonds or other valuable assets which a family owns. These are assets or wealth which represent the result of past saving.

Financing Real Investment through Financial Investment

The fact that people save part of their current income means that there is real saving of productive resources which are available for the production of capital. It also means that there is a stream of purchasing power available for financing investment. The problem is to make this money available to companies who want to invest in real capital. This is the function of financial institutions; they facilitate financial investment which pays for real investment.

Most real investment is carried on by corporations which have open to them many ways of obtaining money for real investment. A corporation can pay for new buildings or equipment out of it's own saving, profits retained in the business. Also, a corporation can get purchasing power through selling corporate stocks and bonds, thereby using the saving of individual families. Or it can borrow directly from banks or other financial institutions. This process of financing real investment is what creates financial capital, i.e., stocks, bonds, mortgages and other certificates of ownership of financial capital. Such certificates exist for most of the real capital in our economy.

The people or businesses who buy stocks, bonds, mortgages, loan notes are making a FINANCIAL INVESTMENT. They are exchanging money for financial capital. In so doing they provide corporations with the necessary money to finance real investment in plant, equipment or inventories. In large part this financial investment is done by people out of their current saving. When your family uses current income to buy General Motors stock they are using saving to make a financial investment. Or, if the family puts $50.00 a month in a saving account, the bank has increased deposits and can increase loans to businesses.

VI. Summary

The desire for increased productivity leads to specialization which makes distribution (exchange) necessary, and this requires the use of money. In turn, the use of money makes us dependent on having a flow of purchasing power in order to exist. There are four ways of obtaining purchasing power: 1) earning an income from providing productive services, 2) using credit, 3) selling an asset, 4) receiving a transfer payment from an individual or a government agency.

Money and credit also help to promote economic growth. Our monetary and credit system allows the savings of millions of individual savers to be used by borrowers for investment in new capital. Each individual who saves some of his income ($S = Y - CC$) consumes less than he contributes to production. All of the individual savers put together enables the society to use a large part of its productive resources. In this way the credit system makes possible the economic growth which leads to the increasing economic well-being of the society.

CHAPTER 4

A MODEL FOR COMPARING ECONOMICS

I. Introduction

Gertrude Stein, a famous twentieth century literary figure, defined a rose as, "A rose, is a rose, is a rose." And Shakespeare said, "A rose by any other name is just as sweet." In the social sciences, it is not so easy to dismiss the need to define terms. For instance, economists talk about the U.S. society, or the U.S. economy, or economic system. What IS the U.S. economy?

To get an insight into the meaning of the concept economy, we can borrow from Gertrude Stein to say, A nation, is a society, is a culture, is an economy. All of these words describe the same entity. All represent an organization of people into a community. Each word describes the same group of people doing the same things, but the terminology varies with one's viewpoint. A political scientist speaks of a nation or a political system, a sociologist of a society, an anthropologist of a culture, and an economist of an economy or an economic system. Each group uses a different word because each has a different view of the same entity, the social organization of people.

Society, seen as an economy, serves two main functions: it organizes production, distribution, consumption saving and investment to use resources efficiently to overcome the scarcity problem; and second, it organizes ways to resolve conflicts of the use of the scarce resources. The economy is made up of all the groups of organizations which perform the economic activity of production, distribution, and consumption.

Up to this point we have explored how the U.S. economy is organized to carry out the production and distribution activities which provide us with a high and growing standard of living. The specialized and technical methods of modern production used in American industry are organized, primarily, by large corporations capable of acquiring and managing large amounts of capital. These corporations are served in turn by others which organize distribution and exchange of the economy's output. In particular, financial institutions like banks provide services which permit consumers and businesses to manage their money and financial assets. Because the U.S. is a money exchange economy, access to money or credit is essential for any buying or selling. The discussion in previous chapters illustrates why our high standard of living requires complicated and efficient forms of economic organization. Economic well-being requires efficient production methods which must be planned and carried out efficiently by organizations.

The first three chapters have presented a brief introduction to the basic structural characteristics of the U.S. economy. This chapter introduces an entirely new dimension. Here we turn to a study and comparison of different economies. This chapter summarizes the characteristics which all economies have in common and suggests a way to compare them. You will see that economies can be compared by studying the differences in the economic organizations which perform the basic economic functions required to satisfy wants.

II. The Five Basic Economic Activities

Economic activities are those which conserve (economize) scarce resources. People in all societies engage in five primary economic activities: PRODUCTION, DISTRIBUTION, CONSUMPTION, SAVING, AND INVESTMENT, all of which have been discussed in earlier lessons. Here, it is enough to review by showing why they are classified as economic activities--how these activities conserve scarce resources.

Production is economizing because resources are transformed into goods and services which are more satisfying than were the original resources. The fact that people are willing to pay more for the final output of production than they are for the inputs indicates that production makes resources into more useful things. Production can be wasteful if people don't want the things produced, or if inefficient methods are used which unnecessarily use up scarce resource.

Distribution, the transfer of goods from the producers to consumers, is necessary if people are to use the things produced from specialized production. It is important to find efficient forms of distribution to assure that people get what they want or can afford and to avoid wasteful handling and transportation expenses in getting output from the producer to the consumer. In most countries today, distribution occurs through market exchange, or trade between people. Exchange economy is scarce resources because the persons involved are better off afterwards than they were before the exchange. Each has something he values more than what he gave up. This is dramatically illustrated in trade between countries where, for instance, the United States imports coffee from Brazil and sells cars to that country. But it is generally true of trading. Each person receives something he values more than what he traded.

Consumption, using goods and services to satisfy wants, is a primary economizing activity if people consciously make a choice about what to consume. The conscious selection of goods and services, chosen by calculating alternative costs, gives a person more satisfaction from his income. No one can have everything, but the individual can at least select those products which give the greatest satisfaction. Even the very rich have to make alternative cost calculations about what to consume. How many meals can a rich man eat at once? He can have a thousand suits, but he can wear only one at a time. He can afford to support several lives, but he has only one.

Saving, is not spending current incomes. It is the amount earned minus the amount spent on consumption of goods within the same period. If a person earns $10,500 in 1966 and spends $10,000 on consumer goods and services, he saves $500 in 1966. (He may actually spend the $500 by buying savings bonds or corporate stock, but this is not spending on consumption.) Saving is a primary economizing activity because the person who saves chooses to reduce current consumption in order to increase his wealth, and thereby, future consumption. He saves to satisfy future needs.

Investment is that part of current production devoted to making capital goods--the man-made inputs into production: technical training, buildings and other improvements of land, tools and equipment, changes in stockpiles of materials and goods for future production or sale. Investment is a primary economizing activity because the newly-produced capital goods will increase future production. If General Motors builds a new assembly plant in northern California in 1966, part of the U.S. production activities, 1966, are devoted to building and equipping this plant, and, thus, they cannot be used to make consumption goods which satisfy current wants. Although producing capital goods reduces current production for immediate consumption, it will increase car production after 1967. Similarly, if you decide to study electrical engineering, you (or someone) will pay for your education. The resources used to educate you (professors, buildings, labs, books, etc.) are not providing current consumption goods, but are investments to increase the amount of available engineering talent a few years hence.

III. Economic Choices: The Four Basic Economic Decisions

Before there can be action, there must be choice. Choice can be made automatically (which shoe did I put on first?) or, consciously (shall I argue or keep quiet?). Every economic activity involves a series of choices about the use of scarce resources. This is because there are alternative uses of the scarce resources. This is what is meant when we say that an allocation (use) decision is implied by every economic act.

Earlier chapters have discussed the four types of allocation decisions involved in economic activity: (1) decisions about WHAT to produce, (2) decisions about HOW to produce the chosen output, (3) decisions FOR WHOM to produce the output, and (4) the question of HOW MUCH output to produce in total.

The WHAT decisions involve both obvious and not-so obvious choices of what should be produced. Someone has to choose between producing cars and bicycles; next, they must decide on the type of car or bicycle and what materials to use in producing them. Other WHAT choices are more basic, e.g., what percent of output should be luxuries and what percent necessities? How much of total output should consist of production of capital goods? An important WHAT question for the U.S. citizens today is, to what extent do we produce public goods and services? Do we produce private cars, build private suburban tract houses? Or do we build public roads; do we finance NASA (National Aeronautical and Space Administration) to send men to the moon: do we maintain large military forces or build public housing or enlarge a state university?

The HOW decisions raise different but related questions. How shall the inputs be used to produce these things? How shall they be combined? How should production be organized? How much butter should Betty Crocker put in her cake mixes? Is it profitable for a company to install an I.B.M. billing machine to do the clerical work now performed by a staff of twenty full-time billing clerks? In a different form, HOW can often mean WHERE and WHEN. WHERE should a textile firm locate--in New England, South Carolina, or in Japan? How fast should A.T.&T. automate its entire switching operations by introducing a recently developed electronic procedure?

The TO WHOM question involves decisions about distribution of outputs. In a money economy such as ours, where almost everyone earns a money income, the individual's share of the total output is limited to what his income plus his credit can buy. Within that limit, WHAT he buys is pretty much up to him. However, his choices are limited by government taxing and spending. For instance, local governments levy property taxes to finance the local public schools. The effect of this policy is that whether you choose to or not, you are getting educational services, and children of school age are required by law to go to school. But the policy has another effect--it actually redistributes income. The children from low income homes receive services in excess of what their parents have paid for in taxes, while more wealthy people with no children in school do not receive any direct benefit from paying property taxes. This is the short-run effect. In the long-run the effect should be to increase the productivity of the economy through the development of a more effective labor force. Because the TO WHOM questions pit various vested-interest groups against each other, they are the basis of much controversy.

The last question, HOW MUCH, affects all the other decisions. It is the question of how much of the available resources will be put to use producing things people want and how much will be devoted to consumer goods and services, and how much to capital accumulation. That is, how much will be saved and invested out of current production? Whenever there are unemployed resources (e.g., a manufacturing plant is operating at seventy percent of optimum output) the society could be producing more. Should more be produced? Maybe, and maybe not. Perhaps there is not enough demand to support full production. Whenever workers are unemployed against their will, there is available manpower which could be used to increase output; but should an effort be made to employ every willing and ablebodied worker at all times?

These four kinds of choices, taken together, are at the heart of economics; we study how these choices are made and how well they are made in any given economy.

IV. Economic Institutions

An economy is made up of organizations, or ECONOMIC INSTITUTIONS, which make the allocation decisions and perform the five primary economic activities. The major types of economic institutions in the United States are 1) consumer units--individuals, families, and institutions such as hospitals, children's homes, etc; 2) business firms--owner operated, partnerships, and corporations; 3) financial institutions--banks, savings and loan companies, loan companies, the stock market and the brokerage firms which serve its customers; 4) private associations--labor unions, trade associations, buyer-seller, or consumer cooperatives; 5) government agencies--which provide economic services, post office, schools, Armed Forces, Federal Reserve system, and the agencies which regulate aviation (FAA), etc; 6) the political bodies which make major allocation decisions on all levels of government going from the city council, to the county supervisors, the state legislatures, and finally, to the Congress of the United States.

These six categories should account for almost all of the economic institutions in our society although you might well think of some institutions which don't fit--if you do, you will have to invent a new category.[1]

---

[1] In this discussion, the word institution has been used to mean a body of people organized to engage in an activity. The word also has another common meaning. An institution is also a prevailing custom, principle, or system of a society--the institution of slavery in the South prior to the Civil War; the institution of marriage or divorce. In the U.S. property rights are based on the institution (principle) of private property. The Russian economy is organized around the institution of public ownership of capital goods.

Each society has its own unique set of economic institutions which have similarities and differences with the institutions of other societies. For example, Soviet Russia is a highly industrialized economy like the United States and it is similar in that its consuming units are individuals, families and institutions. It also has business firms but they account for only a tiny part of total production. At this point similarities end; differences begin. Most production is carried out by government firms which produce according to an economic plan developed by a central economic agency. The political bodies which make economic decisions are the legislature (the Supreme Soviet) and the Communist Party. Private economic associations--like labor unions are very different because wages are not determined by collective bargaining. There are no trade associations because individual firms in one sector of the economy are not supposed to form an interest apart from the rest of the economy.

V. Modes of Economic Decision Making

Now we can summarize to say that any economy (society seen from the economist's perspective) is made up of the total group of economic organizations (institutions) which make the basic economic choices and engage in the five primary economic activities. Studying an economy means studying its economic institutions and the exchange relations between these organizations to learn how and how well the organizations perform to satisfy human wants.

Although all economies have the same purpose, each society has unique kinds of economic organization. Each has its own kind of economic institutions with particular purposes, modes of organization and ways of operating. In the United States, we have private corporations, small, family-owned businesses and the family farm, public schools, and labor unions. In Africa, there are still people organized in primitive tribes with little contact with modern life. In Russia, most production is carried out in government-owned factories and stores. The culture of the country obviously influences the organization and functioning of economic institutions.

To understand the variations in economic organization between societies, it is helpful to introduce a third classification system. Economic organization of decisions and activities are influenced by some combination of CUSTOM, AUTHORITY, or MARKET BARGAINING, and the particular customs, types and uses of authority and forms of market organization help to give an economy its uniqueness.

In the U.S. it is easy to cite ways customs rule economic choice and action. To a large extent, personal habits determine what we eat, how we dress, how we cut our hair. To the extent that most people in America have similar habits, there is an American institution (way of life). Americans eat three meals a day, play baseball, celebrate the Fourth of July, work eight hours a day. The adage, "a penny saved is a penny earned" guides saving habits of many, while a favored rule of our forefathers, "I only buy when I can pay cash" is falling into disuse.

At the same time, many decisions are made and activities organized as a result of decisions made by some authority--a government official, factory superintendent, school principal, parent. In the United States, the important decision about how income and output should be distributed among the people is made in part by government authority. The Federal government income tax system taxes a larger percentage of income of high income earners than of low income earners. In addition, government agencies pay out government subsidies (income) to different groups--to veterans, disabled persons who cannot earn an income, railroads and airlines to help pay for mail service. These government policies redistribute income among the people. Similarly, government decisions to build highways, finance public education, maintain an army and airforce are all command decisions about what to produce. They are economic decisions made by an authority rather than by the individual citizen.

In the United States many economic choices are made through market bargaining--through buying and selling. When you buy a car, you choose what to spend your income on. When, each fall, General Motors announces the new line of cars and their prices, the company agrees to supply cars to customers at those prices. The bargaining between buyers and sellers determined what will be bought and how much will be sold. Furthermore, because we earn income from providing productive services, the for whom decisions are affected by market bargaining. A person's earnings are affected by the amount an employer is willing to pay for his labor or brain power.

While custom, authority and market bargaining each has some influence on economic behavior in any society, in some economies one type of decision making may dominate. Economies are often classified according to the dominant kind of decision making present in the system. The Russian economy is considered a command, or planned economy. The United States' economy is referred to as a market economy, and more often, as a "mixed" economy to indicate the importance of all three decision making patterns. Primitive societies, such as the indian tribes we will study, are traditional economies because custom dominates decision making and the operation of economic institutions. Such designations are somewhat dangerous because they over-simplify, but they serve to differentiate economies according to which of the major modes or patterns of decision making and action are most important in affecting economic allocation choices in that society.

VI. Economic Goals

A major concern in studying a society's economic performance is to arrive at some assessment of the country's success in achieving important economic goals. A major goal which we've already discussed is growth, growth in the per capita income and well being of the people. There are other goals as well and it is possible to classify them into a small number of categories: We can identify five general economic goals: (1) economic progress, (2) economic freedom, (3) economic justice, (4) economic stability, and (5) economic security.

Progress

Economic progress, as we have seen, is defined primarily as economic growth, that is, increasing production through capital accumulation which leads to higher and higher per capita incomes. Simply stated, it means that, on the average, people have more and more goods and services to consume.

Progress also has a qualitative meaning, that is, that the quality of life in a society should improve along with the increasing consumption of goods and services. In America, this means that automobiles, washers, toasters, and houses should be increasingly more satisfying and services like public transportation, recreation, and medical care should be the same. It also means that no amount of consumption can be satisfying if our living environment becomes progressively less attractive. Qualitative progress requires clean water, fresh air, parks, tree-lined streets, new buildings, and good sanitation--it means, in America, the end of slums and urban congestion, it also means an end to endlessly sprawling suburbs which eat up the countryside.

Freedom is a complex word and almost every society uses it and believes in it. Of course, it means different things to different societies but for each society it carries with it the idea that man has the power to affect his own destiny. Some societies believe freedom can only be found in a group, and for some (Hitler for example) the group was the whole nation of German people. For most Americans, however, freedom is something enjoyed by the individual. It is the power of an individual to affect his own destiny by making his own choices.

Economic freedom is the ability to choose the kinds of economic activity we want to take part in--to work where we wish, sell what we wish and buy what we wish. In this sense, freedom is an aspect of power, power over our own actions and choices--the power to do what we want to do when we want to do it. All of us know that our power and, thus our freedom is restricted. Scarcity confronts every man and limits his ability to satisfy all his desires; the laws under which we live limit our freedom to engage in many economic activities. A person can only practice medicine if he has a license issued by the state or teach school only if he has a credential issued by the state. We are prohibited from buying or selling narcotics, from driving vehicles which do not conform to certain standards, and so on. In thousands of ways our economic freedom is limited, and yet Freedom remains a major goal; clearly, it is not one which is easy to achieve.

Justice

The problem of economic justice is primarily concerned with two things: (1) that the law coerce all and protect all in an equal manner, (that there be equal protection under the law), and (2) that the output of an economy be divided justly among the members of the society. Most people have a pretty good idea of what constitutes an ideal administration of the law and and ideal distribution of the output. As long as a socio-economic system operates somewhere close to the ideal system held by the majority of the people, it can be said that economic justice prevails in the society.

The matter of the equal protection of the law is fairly simple. Legal equality means that a person is protected in his right to engage in any legal economic activity for which his talents qualify him. Obviously, racial discrimination is an economic inequality. By extension, the freedom to obtain training which develops talent is also a matter of economic justice, and this is why our Supreme Court ordered the end of segregated schools in 1954. U.S. history gives constant instances of the efforts of groups of people to obtain economic justice, and you should have no difficulty calling some of them to mind.

The discussion of what constitutes a just distribution of output is a much more difficult task, and is possible only if justice is first defined and definitions of justice are highly personal. Only one solution seems likely to gain universal assent, and we have already studied the difficulties that that solution faces. It is to produce so much that everyone will have all he wants, that is, to eliminate the scarcity problem. Although we are not likely to solve the scarcity problem, it is still true that very rich societies like our own usually have less conflict over distribution problems simply because people are less threatened when they are asked to share a large output than they are asked to share a small one.

There are four principal standards for distributing output. They are (1) by merit, (2) by need, (3) by giving each one an equal amount and (4) according to one's contribution to production. Each standard, taken by itself, has theoretical and practical faults which make it impossible to attain.

The merit system is used when society is ruled by an aristocracy or priest hood which has the power to distribute large quantities to the undeserving many. Here the meritorious are those who are deemed deserving by the ruling authorities.

Distribution by need seems fine at first until one tries to figure out how need is determined and how you would match need to output. There are approximately 200 million people in the U.S. How could the need of each be determined? How would each person be given the command over output which exactly matched his need? What would happen if needs were larger than output? If they were less than output?

If we divided all the purchasing power equally every month we would satisfy the equality standard, but would we increase economic justice? For example, does the child or the old person need as much income as a young man or woman getting an education? Does the person who, because of physical, mental or psychological deficiencies deserve as much as a vigorious producer? What would happen to incentives under such a system?

In a society the system of distributing output depends on the persons contributing to output, tempered by distribution according to need. This maintains incentives and induces the person with a high level of need to make a large contribution to production. In those cases where need is greater than the capacity to provide productive services, private charity or government welfare makes up the difference. In our society, the federal government increases income to the needy establishing a minimum wage, administering unemployment and social security benefits and providing medical care for the aged and the infirm. In addition, it transfers income from taxpayers to farmers, airlines, and oil producers.

In our society, the richer we grow the more generous w become in recognizing the needs of the needy, and we support benefits beyond personal contributions. In fact, a presidential commission has recommended that each family in America receive a minimum of $3,000 per year.

Stability

Stability in an economy generally means that the economy grows at a stable rate so that people have a regularly increasing standard of living. It also means that everyone who is able and willing to work can find a job (full employment) and that prices remain stable so that people are not harmed by inflationary price rises. In an industrialized economy there is a tendency for business activity to fluctuate. Nineteenth century American history is marked by these booms and busts. In a poor country, the economy's stability may be tied to the price of the major products it sells abroad. If coffee prices drop, incomes in Brazil are severely affected.

In our modern economy, stability can only be maintained by influencing the level of operation of the whole economy. Consequently, maintaining stability is primarily the responsibility of the federal government. Until the 1930's the federal government was not concerned with stability, but at the depth of the Great Depression unemployment was so high (30 per cent) that the government faced the clear choice to either solve the problem or to watch society disintegrate.

Since World War II, economic science has provided the U.S. Federal Government with tools needed to deal with economic stability problems, and we have not had a serious depression in the last twenty years. In 1964 Congress passed the Full Employment Act which established full employment and the maintenance of price stability as congressional responsibilities. The government can promote stability through its taxing and spending policies and through its control of the amount of money in circulation. For instance if there is a high level of unemployment, the government can increase employment and stimulate demand by increasing its own spending. On the other hand, during an inflation when prices are rising, the government can reduce its spending or increase taxes, or increase interest rates on government bonds.

Security

Security is economic stability for an individual or a family. It is the assurance that there will be an uninterrupted flow of purchasing power sufficient to meet the needs of the individual or family. Obviously, if an economy is stable, it increases the possibility of economic security for everyone but economic stability does not insure everyone's economic security. Any individual can always lose his job, have a disabling injury or illness and thereby cause himself and his family to be in want. Also all of us grow old and we must be provided for in old age.

In a modern economy where specialization is highly developed and almost everyone is dependent on everyone else, it is difficult or impossible for each individual and each family to provide completely for their own security. In the United States, during the New Deal era of the 1930's, the federal government passed a series of laws creating social security programs. The social security act brought into existence the Old Age and Survivors Insurance Program which required workers and their employers to contribute equally to a fund which would provide old age benefits to the workers in the program and survivors benefits to wives and children of workers who die. A state program set up another payroll tax to pay unemployment compensation for workers who are layed off from work because of a decline in business activity. A minimum wage law was passed in 1938 stated a minimum hourly wage for workers engaged in interstate commerce and covered by the law.

The Importance of Economic Laws

We have already seen that in the United States all of these goals are highly valued. But just as the scarcity condition prohibits us from producing enough goods and services to satisfy all wants, so it also makes it impossible for us to achieve perfect justice, freedom, stability, security and progress. Because the people in different societies value different things, there are differences in the relative importance of these goals in different economies. In the United States we value progress and economic freedom. Many of us believe that the high standard of living enjoyed here as compared to the rest of the world is due to our freedom to own property and to advance our own economic interests as much as we can. Critics of too much individual economic freedom claim that the effect of our desire for economic freedom to pursue our own self interests is to create an economy where some members do not receive a just portion of the output, where some face a life of economic insecurity because of their difficulty in getting and keeping a job.

On the other hand, in Russia economic growth is also a major goal. But there, the general objective is to achieve economic growth, security and justice by curbing the freedom of individuals to own property and to use it for their own private gain. The differences in goals of these two countries means a profound difference in economic organization. In the United States the primary decisions about what and how to produce are made by the executives of private businesses motivated to increase sales and profits by supplying goods and services demanded by the consumers. In Russia, before the recent economic reforms, the major allocation decisions were made in a government plan which set quotas of production output for all of the industrial plants in the country.

Major economic and political problems confronting the world today involve the desire of the poor people in Asia, Africa and Latin America to increase dramatically their economic and social well being, among other problems. These are countries with strong traditions where the values held by the people may conflict with the goals of economic progress. Economic progress in such countries will require changes in the culture of the society--in forms of economic organization and in the values of the people--and changes which will foster a higher rate of investment in human and non-human capital.

Summary

This lesson has outlined the universal characteristics of economic organization, characteristics which are found in all societies. We presented them as sets of economic categories which can be used to analyze and compare economic systems:

Five basic economic activities
Four basic economic decisions
Three modes of economic decision making and action
Five economic goals.

The first two categories describe the function of economic organization--to make allocation choices and engage in economic activity to satisfy wants. The second two categories identify the social norms and values of the society which make economies different and which affect their performance in satisfying wants. Although these four categories of characteristics exist in any society, each society has its own unique character--its own economic institutions.

CHAPTER 5

THE ECONOMY IS A SYSTEM

("No man is an island, entire of itself." John Donne, 1573-1631)

I. Introduction

Before we go much further into the study of the U.S. economy or any economy for that matter, it is important to get a picture of what it is we are studying. We keep referring to "the economy" as if it is an entity, a thing. But in the last chapter an economy was defined as the total group of economic institutions (organizations) which make the allocation choices and carry out the economic activities of a society. The United States is made up of millions of these economic organizations--millions of families, thousands of businesses, hundreds of labor unions, thousands of different government agencies which engage in economic activity. Is it possible to see or comprehend how all of these organizations are related and organized into the U.S.?

In this chapter we will do just this--we will look at the economy as a system. A SYSTEM is a group of parts which, taken as a whole, perform a function. A car is a system of mechanical parts which, when put together in a particular way, turn into a gasoline powered vehicle which transports people or things over roads or some sort of cleared off path. A car is not just a collection of parts; it is the collection put together in a particular way to perform a particular function.

Seeing the economy as a system is harder because it is not possible to see the whole economy; nevertheless, the U.S. economy is a system of economic organizations. The economy is not just a collection of families and businesses and government agencies. These organizations are related to each other in such a way as to perform the major economic activities. In this chapter we will look at the economy as a whole thing to see how the various economic institutions, all taken together, carry out the work of the want-satisfaction chain.

II. In a System, Everything Depends on Everything Else

No one can study economics without becoming aware that each of us is a part of a large system in which the decisions we make are shaped by earlier events and then go on, in their turn, to effect other events. This great system which we call society forces us to take our pick from a limited set of choices--almost as though life were some great multiple-choice examination--and our choices, once made, affect others through chains of events over which we have no control.

You might argue that you have control over the choice if the question you must decide is, "Shall I go to the movies Saturday night?" But many forces have acted to present you with even this simple choice and to shape your answer. You live in a country where there are movies. (If you were a Ubangi, you might never have seen a movie.) A movie is being shown (someone decided to book the movie) in a theater (someone decided to build and operate the theater, using money obtained as a result of some other series of events), and someone has to have the price of admission (which did not come out of thin air). Presumably, you expect to stay awake (you probably will not take a twenty-mile hike during the day), and you will be available (not working, or stuck on some location too distant to reach the theater) and so on.

No single decision or action seems likely, by itself, to have much impact on our economy, and yet, each decision contributes to forces that affect many people participating in the exchange economy. If enough people patronize a certain kind of movie, movie houses do a good business, new ones may spring up, and movie makers will concentrate on making more movies of the same kind. If enough people decide not to go to the movies, movie houses close down; movie making slows down or stops; those who depended on the movie industry for a living must go elsewhere, and so it goes.

We do not have to pursue these chains of events very far to realize that what happens in a real-life economy is incredibly complicated. To try to understand the system is like trying to find your way around the tangled streets of a strange city where you cannot even speak or read the language. Then you get a map. The map removes the clutter of detail and shows you relationships. Now you can see that if you take the third turning on the left, and the first on the right, you will reach your destination. The web of streets is a system, and the map is a diagram of the system. The map doesn't tell you all about the street system by any means, but it simplifies things to the point where you can make decisions. By describing only the essentials, the map enables you to picture the whole system and to make certain kinds of decisions relating to it.

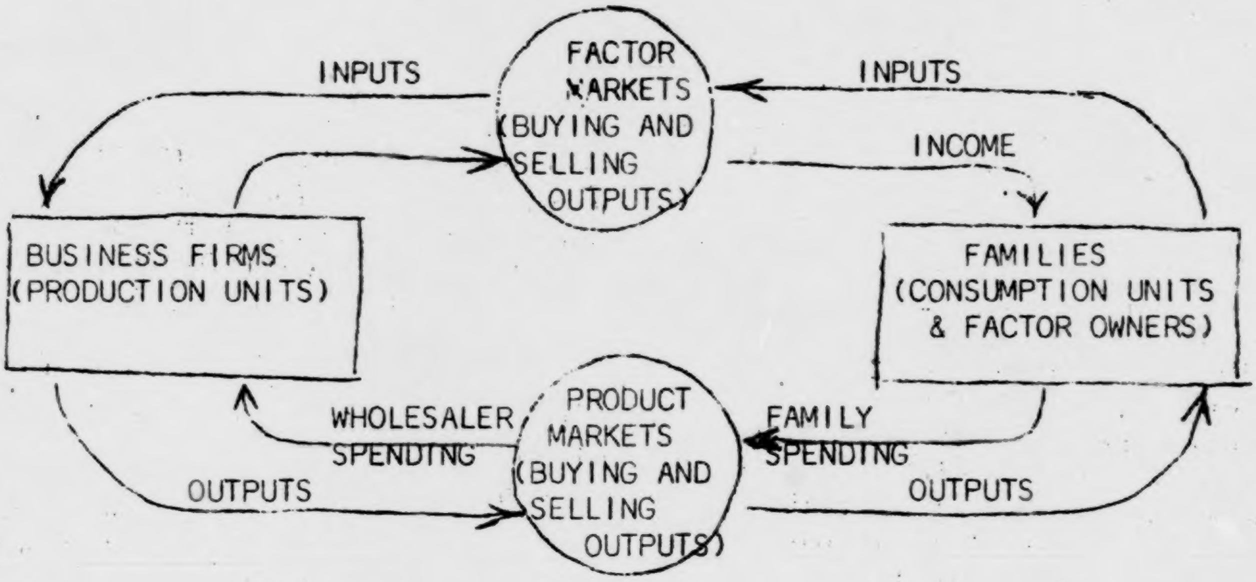
III. The Circular Flow Diagram

The circular flow diagram, pictured below, is like a simplified map of our economic system. It is a summary picture of the system which, by leaving out the snarl of detail, gives a view of the big scene; we can see the basic relationships that are hidden when we pursue details. It is a model of our economy--something other than the real thing--which helps to explain the real thing.

The circular flow diagram is a simplified model of a money-exchange, industrialized economy, or economic system. The boxes and circles in the diagram represent the major economic institutions in the economy: business firms, families, factor markets and product markets. The connecting flow line arrows are intended to show the relation between the four major types of economic institutions.

The diagram defines the function of each type of institution and makes several statements about the relations between firms and families, the two major groups of producing and consuming units in the United States.

THE CIRCULAR FLOW DIAGRAM: A MODEL OF MONEY- EXCHANGE ECONOMIC SYSTEM


INPUTS
FACTOR MARKETS (BUYING AND SELLING OUTPUTS)
INPUTS
INCOME
BUSINESS FIRMS (PRODUCTION UNITS)
FAMILIES (CONSUMPTION UNITS & FACTOR OWNERS)
WHOLESALER SPENDING
PRODUCT MARKETS (BUYING AND SELLING OUTPUTS)
FAMILY SPENDING
OUTPUTS
OUTPUTS

1. Firms purchase productive services from families, and families purchase final output from firms.
2. The exchanges are money exchanges. The upper part of the diagram shows that inputs flow from families to firms in exchange for money income. The lower part shows that output flows from firms to families in exchange for money.
3. Firms and families are completely interdependent. Firms depend on families for the supply of factors of production and for the purchase of their output. Families depend on firms for their income and for the goods and services which satisfy their wants.
4. The interdependence between firms and families is circular: inputs are transformed into outputs, which are used by families to generate new inputs. The money paid to input owners is used by the families to buy the output of the firms. The money circulates round and round the system between firms and families. (The circular-flow model of the economy can be likened to the circulatory system of the human body in that both systems produce a circular and continual transformation of inputs to outputs to inputs to outputs.)
5. Goods are distributed in factor and product markets. Usually families and industrial firms do not sell to each other directly. Instead, there are exchange institutions which link families and industrial producers. In PRODUCT MARKETS retail stores (who may have bought what they sell from wholesalers) sell to consumers. Product markets are made up of businesses which buy from manufacturers or wholesalers and sell to consumers. Similarly, FACTOR MARKETS are made up of economic institutions which facilitate the sale or renting of the services of factors of production. Labor unions and employment agencies, real estate agencies, leasing companies--are all economic institutions which operate in factor markets.

The circular flow diagram shows our economy as made up of four types of subsystems--firms, product markets, families, factor markets--all bound together, dependent on each other through a continuous, never ending series of money exchanges of goods and services. The diagram is the want-satisfaction chain, its ends brought together to show a continuous, round of economic activity. However, the diagram adds a new element, money. The money supply continually changes hands, circulating through the economy in a chain of exchanges between consumers and producers to pay people for providing real goods and services.

III. Macroeconomics

Now that we have a picture of the operation of the whole economy, we can start to speculate about a very important question--the question of what determines how much output an economy produces. This is the fourth of the four basic economic questions--what, how, for whom and how much. Studying the effects of the operation of the whole economy on how much output is produced is called MACROECONOMICS. Studying how the individual economic institutions perform their function in an economy is MICROECONOMICS. Up to this chapter we have been involved in microeconomic questions, for we were studying how the automobile manufacturers organize production, how banks and other lenders provide credit to borrowers, the way the Kiowa and Tsimshian Indian clans organize economic activity within the tribe. In macroeconomics, we study the results of all this activity for the whole economy. We try to measure and predict the total volume of output produced and income earned as a result of eocnomic activity. Then we go one step further to try to find out how to increase this amount from year to year to promote economic growth.

IV. Measuring Macroeconomic Activity

The circular flow diagram provides an important insight into the operation of the whole economy. The diagram is even more useful when it is made into a movie. Try to picture the flow lines as moving streams. The outside stream is a stream of goods and services moving from families to firms. The inside stream is a flow of money in the opposite direction. If you could count the amount of money flowing into the families or into the firms during any period of time, say a month, you would be able to measure the dollar value of income earned or of output produced during the month. The money flowing into the firms measures the market value of consumer spending on the output produced during the period. The money flowing into the families measures the amount of income earned for producing that output.

In fact, economists do estimate economic activity this way. GROSS NATIONAL PRODUCT (GNP) is the estimate of the market value of the final output of the economy over a period of time. GROSS NATIONAL INCOME (GNI) is the estimate of the total income earned by people for helping to produce the output. In 1966 GNP and GNI were estimated at $743 billion dollars. We will study GNP and GNI more completely in Unit III. Here, it is important to note three things about GNI and GNP-- all things which you should be able to understand if you have a clear understanding of the circular flow diagram.

The first point is simple and has already been made. It is that economic activity is measured in dollars and cents rather than in physical units. We measure the market value of total output because it is impossible to measure any other way. One cannot add up tons of steel, thousands of airline tickets, millions of cans of hair spray, millions of cars. Since all of these outputs are sold for money, it is possible to add up their market value, and that's what we do.

The second point may seem unimportant but it is not. It is this. GNP and GNI are measured as RATES. They measure the flow or rate of economic activity over some period of time. If GNP is $600 billion per year in 1964, this means that, on the average, the economy produced $50 billion per month (600 billion/12), or $1.6 billion per day ($600 billion / 365). Actually, during any given month during the year output probably would be quite different than $50 billion; there may not be any days when GNP for the day would equal $1.6 billion. This is because economic activity does not go on at a constant rate. Less is produced on Sunday than on other days, more is produced in the fall months than in January and February. The point to remember is that when attempt to measure economic activity, what we measure is the output of income generated by that activity over a period of time.[1]

The final point is the most important to your understanding of the forces affecting the rate of economic activity of an economy. It is that GNP+GNI during any time period. The circular flow diagram should explain to you why this equality must exist. It is because gross national product and gross national income are both products of the same activity--production. GNP measures the value of the output, GNI measures the value of the input. They are both equal because the cost of producing the output is the income received by those who helped produce it.

The total income generated in any time period depends on the productive services provided by factor owners during that period. The total output produced for that period depends on inputs and on the willingness of the families to buy the output. In this simplified model, where families spend all they earn and firms spend all revenue for new inputs, it follows that income earned equals output produced during that same time.

---

[1] This is probably an important place to bring up a general point about measuring economic variables. The discussion above points out that economic activity--production, exchange, consumption, saving, investment--are all measured as rates over time because the activity is a flow. Another very important kind of economic measurement involves the measurement of wealth. Wealth is not a flow, but, rather, a STOCK of assets which can be counted or valued. You own a $50,000 business or a $1,500 car, but you earn $500 per month.

It is important to learn to distinguish between these two different kinds of measurements--stocks and flows. To repeat, A flow measures a rate of activity, i.e., a measure of something generated over time. A stock measures a quantity which exists at some point in time. Wealth is a stock, an existing asset, which can be counted and valued. An example will show the differences. A firm produces 1600 pairs of shoes per day, valued at $10.00 per pair. It employs 100 workers who are $2.00 an hour. Production is at the rate of 200 pairs of shoes per hour. Production is a flow. At the end of the day, the firm has 1600 pairs of shoes, a stock. Workers earn $2.00 an hour, a flow; at the end of the day, one worker has $16.00 in assets, a stock.

IV. Shortcomings of the Model

Like any model, the circular flow diagram is a simplified view of the real economy. Certain assumptions make the model simpler than the real economy. These simplifying assumptions make the model an inadequate description of some aspects of our economic system. For instance, it omits several important parts: saving and investment activities, financial and governmental agencies and transactions involving them, round-about-production, wealth. Also the diagram does not describe how production, distribution and consumption are organized, how the basic decisions of what, how and for whom are made.

It does not give answers to the big puzzles of macroeconomics; it does not explain the causes of changes in the level of general business activity (changing rates of GNP) or the growth of the total economy. Instead, the model suggests a constant circulation of money and goods, when, in reality, the rate of generation of GNP is not constant; there are cycles in business which create periods of inflation followed by periods of unemployment. This activity increases and decreases throughout the day, the week, the months and the year, according to the season of the year and to the over-all health of the economy. Despite these cycles in economic activity in the United States, GNP tends to grow over time. The model does not enable us to predict either the fluctuations (changes) or the level of economic growth.

Finally, the diagram does not describe all economies because they are not all money-exchange systems. With simple changes in labels, the diagram of the U.S. economy can represent other money systems, including those of societies dramatically different from our own. To describe the Soviet economy, for instance, the only changes needed in the labels would be to show that Russian firms are State owned and that there is no property income flowing into households. However, the diagram cannot represent an economy which does not use money or where production and consumption occur within one institution--family or tribe. This limitation of the diagram is useful because it emphasizes the structural differences between the self-sufficient economies of tribes and the interdependent, money-exchange economies.

Because it leaves so much about the U.S. economy out, the circular flow model does not help us predict much about how much output and income actually will be produced in a given year. its primary value is to give a picture of the economy as an exchange system between producers and consumers. In addition, it shows that the same activity which generates output (measured by GNP) generates income (GNI). It shows that economy activity is measured by rates. Finally, it suggests that an economy will operate at a constant rate of output and income per year as long as consumers spend as fast as they earn.

CHAPTER 6

ECONOMIC EFFICIENCY AND THE GENERAL WELFARE

I. An Introduction

Previous chapters have provided a frame reference for studying economics by building up a clear picture of the object of economics study--economic systems. Chapters one to three described in detail the organization of production and distribution to increase resource productivity and thus society's ability to satisfy human wants. Chapter 4 identified the common characteristics of all economies, thereby providing a way of studying and comparing economic systems. Chapter 5 expanded the want-satisfaction chain into a simplified model of the U.S. economy which describes the basic interdependence between firms and families in a money exchange economic system.

Now we can go back to the basic assertion made in chapter I--that societies cope with scarcity through organizing human activity to increase resource productivity and to resolve conflicts over the use of scarce resources. The one remaining aspect of economic activity to consider is total economic efficiency of a society.

When we ask whether a whole economy is efficient we are asking more than the question of whether all the production processes are efficient. Total efficiency goes beyond production efficiency to measure the success of the economy in resolving conflicts over the alternative uses of scarce resources. It measures the degree to which the economic system promotes the general welfare.

In our society, the GENERAL WELFARE is related to the ability of the economy to promote the five goals of economic freedom, economic justice, economic progress, economic stability and economic security. Promoting the general welfare is complicated by the fact that we do not all share the same value system. Although all Americans value these goals they do not attach equal importance to each of them. Some people willingly take risks and give up economic security to make economic gains; they value their economic freedom over economic security. Others would give up the freedom to exploit economic opportunities for a steady income.

Because of scarcity, the five goals cannot be achieved by all people. Not everyone can be satisfied, and this dissatisfaction often leads to some form of economic conflict. Economic conflicts are resolved through market competition or through political decisions, often to the greater advantage of one party to the conflict. If a society is to serve all members' economic interests, its economic system must be organized to guarantee that conflicts will be resolved in such a way as to promote the general welfare.

This chapter discusses problems of judging the overall performance (efficiency) of an economy. This requires you to gain some insights into how economic policies affecting total efficiency are made. You will see that the process of economic policy making is in response to conflict between economic interest groups and these groups vary a great deal in their power to affect economic policy. Sometimes the policy decision completely resolves the conflict between the groups, and at other times neither group is satisfied but is willing to live with the decision. Occasionally, the conflict continues but at a low enough level to prevent disorder. One way or another, the conflict must be resolved or attenuated sufficiently to allow the economy to continue to function.

These new policies bring about changes in the structure of the economy which reflect the changing power positions of particular interest groups. By the end of the chapter you should be convinced that promoting public welfare requires using some rational basis for analyzing public controversy about economic policy. We will provide you with some of these tools of analysis--methods of conflict analysis which will be useful to you in handling daily economic affairs and in judging the merits of different public policy positions.

II. Judging Total Efficiency

Efficiency is a concept which is used again and again in economics. You have already learned to apply the principle of alternative costs and how to calculate the relative efficiency of two or more production processes. These techniques of deciding efficient allocations of scarce resources are useful in making decisions about particular production processes and particular resources.

If all production decisions in an economy were made on the basis of alternative cost calculations then we would get high production and satisfaction from our resources. However, we would still not be dealing with the question of whether the total economic system was operating to achieve the goals of the society as efficiently as possible. For how do we know that the production and distribution of this output is organized and carried out so as to give maximum economic progress, freedom, justice, stability and security?

We cannot make arithmetic calculation to determine how much economic freedom or justice we produce. These things are qualities, not quantities, and the same is true, to a lesser extent, of economic progress and stability. Although we may not be able to measure the value of the achievement of these goals in dollars and cents, we must make judgments about whether or not our economic policies do or do not promote their achievement.

For any proposed policy change we can study the effect of the change on the distribution of economic justice, freedom, progress, stability and security among the people. For instance, in studying the effect of federal government programs to educate the poor we must analyze the effect of the spending and taxing programs on different groups within the society. The program will increase the educational opportunities of the poor at the expense of higher taxes collected from higher income groups. This reduces the freedom of higher income groups to spend their earned income. If the program improves the training of the poor it will increase their freedom to enter the labor market to compete for jobs and it will provide more economic security for these groups. To the extent that the poor become better trained and capable of continuous work, the added labor power and buying power of the poor will promote economic progress in the future. On the other hand, reducing income available for spending of higher income groups may reduce their incentive to work, thus reducing current output.

The object of economic analysis of proposed changes in economic policies is to find an objective and, if possible, quantitative ways to compare the value of alternative policies. Often, even though one cannot calculate the monetary value of some new program--say a public housing program in a large city slum area--it is possible to calculate its cost. In this case, we can estimate the actual cost of building the housing; perhaps we can also calculate the cost of not building the housing if we can relate crime and unemployment to inadequate housing. With this quantitative information, it is then easier to make the judgment about the importance of the project to the various interest groups making up the society.

Achieving justice, freedom, progress, stability and security involves choices about allocating scarce resources. We have learned that an economy can generate only a limited amount of riches, not the amount required to give each individual complete economic freedom; not everyone can enjoy the perfect justice he desires; progress is slow and few people ever enjoy complete economic security. Just as goods and services must be distributed, so must the broader economic advantages of economic organization. To study the performance of the economy is to study economic policy to learn to what extent and how the what, how, for whom and how much decisions promote and distribute justice, freedom, progress, stability and security within the society.

III. ECONOMIC POLICY

III. Economic Policy

A POLICY is a set of rules or a plan of action designed to guide decisions and activities in order to bring about certain results. Policies exist in all parts of organized society. Each of us makes certain economic policies to guide our own economic decisions and activities. For example, we develop more or less explicit policies about what sort of work we will do, the circumstances under which we will lend or borrow money, whether we will pay cash or borrow money to buy a new car. Economic organizations such as families, businesses, government agencies and government branches (legislative, executive, judiciary) develop policies which control their decisions and activities.

It is primarily the function of government to enact laws and to establish policies regulating the activities of the society's economic institutions. These policies and laws determine which economic organizations and activities are legal. For instance, there are laws on the books in the United States which make it illegal for competing manufacturers to get together to set the price of the product they sell. It is illegal for labor unions to engage in mass picketing during a strike, although in most cases it is legal for unions to go out on strike for better working conditions. There are, however, laws which permit the President to consider some strikes national emergencies and to ask the courts for an injunction which makes the strike illegal for ninety days. These public policies and laws are vitally important because they shape the economic organization of society and are, in turn, shaped by it. Ideally, this legal framework should enable the economic system to operate efficiently in achieving broad goals of justice, freedom, progress, stability and justice.

Federal government policies and laws are especially important because of their broad application throughout the state and anyone interested in his own welfare should be aware of how federal government economic policies affect him. Every important federal economic policy change has an affect on the distribution of economic welfare among individuals and groups. For example, if the federal income taxes are raised, the higher rates will be set differently for different income groups and this will affect the distribution of income. Subsidies are given to airlines and steamship companies to enable them to operate at a profit. Subsidies are, of course, a tax on the general public for the benefit of the owners, employees, and customers of these companies. In addition, subsidies to airlines and steamship companies give them a competitive advantage over other forms of transportation. In both instances the justification for the subsidies is based on the argument that these industries are vital to our national welfare.

Whether economic policies (making the WHAT, HOW, HOW MUCH and FOR WHOM decisions) are made by federal, state, or local government, or whether they are made by business associations, labor unions, or business firms, they promote or detract from the freedom, justice, progress, and security of some groups and individuals more than others. Some policies inevitably harm the interests of certain individuals and groups. Given the condition of scarcity, it is impossible for everyone to be completely satisfied, and we know from our own experience that there are great inequalities in the distribution of satisfaction among people.

IV. Economic Conflict

These inequalities produce dissatisfaction, and it is safe to say that dissatisfaction with the current way of doing things is a normal consequence of the scarcity condition. In a democratic society, conflict among individuals and groups over the alternative uses of scarce resources is normal; indeed it is inevitable.

Special interest groups which wish to improve their economic positions work to change government policy and laws in order to improve their own relative position. Manufacturers of products which face foreign competition work for high tariff policies which raise the prices of foreign products. Labor unions lobby for laws which legalize labor union practices such as strikes and secondary boycotts so that unions can increase their market bargaining power with employers and thereby increase wages or other benefits. Real-estate associations lobby constantly for lower property taxes to make it easier to buy and sell real estate. There are thousands of economic interest groups in our society and their success depends upon their power, both economically and politically. One group's success often means that some other group's interests will suffer. If labor unions succeed in getting laws passed legalizing union tactics such as secondary boycotts (striking businesses which are customers of the firm involved in the conflict with the union) then unions will have more power to win concessions from employers.

Conflicting economic interests between different groups means conflict over the control and allocation of scarce resources, and the institutions of society must resolve these conflicts. In the process of settling the conflicts, a compromise is reached, and the economic organization of society changes to reflect the relative power of the contending groups. For instance, in 1935, with the passage of the National Labor Relations Act, unions were finally declared legal by the federal government and, in addition, employer practices to discourge workers from joining unions were declared illegal. This important law reflected the different attitudes of new political leaders and it set up the National Labor Relations Board to enforce the law and protect workers' rights. The law created a new economic organization--the N.L.R.B.--and provided the legal framework to permit labor unions to form. The laws contributed to an increase in union membership from 3,000,000 in 1933 to 15,000,000 by 1945.

One function of government policy-makers (legislatures) and enforcers (executive and judiciary) is to keep economic conflict to a civilized level and to choose policies which will satisfy the aspirations of those groups which are powerful enough to cause disorder if their demands are not met. Of course, the power of any group, to force its demands, is limited by the willingness of public opinion to tolerate any disruptive tactics it might use. Economic analysis is useful in helping government policy-makers reach rational decisions, that is, decisions which result in the most satisfying use of scarce resources. Using the procedures of economic analysis, the policy-makers can identify and study the alternative demands for the scarce resources and rank the preferences of the contending groups. They can compare the possible alternative uses of the scarce resources with the preferences of the various groups (that is, make alternative cost calculations) and try to identify a policy which will best resolve or attenuate conflicts between groups and, in so doing, promote the public welfare.

V. Growth and Conflict

Economic growth (a combination of progress and stability) brings with it constant change in economic organization and policies. The prospect of change usually causes conflict between different special interest groups who will benefit or be hurt by a change in policy. Economic and social conflict is not only normal in the U.S., but it is a necessary part of economic growth. A society must develop increasingly effective ways of assuring that the resolution of conflicts of interest will result in changes which will promote the general welfare. Let us see how the process of economic growth involves conflicts of interest and brings changes in economic organization.

The essential process in economic growth is the accumulation of capital, both human and nonhuman. Capital is mostly accumulated in the form of a skilled labor force, machines, buildings and other constructions--railroads, airports, highways, dams, etc. When new capital is introduced into the production process it almost always causes change in the organization of production. For example, the introduction of the freeways and jet airplanes completely altered the travel habits of the American public. Within ten years, rail passenger traffic almost disappeared and in the process tens of thousands of jobs were destroyed and other tens of thousands of jobs were created. The people who lost jobs usually fought to protect them, and other groups of people fought to control the new jobs which were created. All of this entailed economic and social conflict.

The introduction of the freeways and jet planes also brought enormous changes in the distribution of wealth. Those who held stock in railroad companies often saw their investment decline in value while those who had invested in airline companies enjoyed gains. Freeways always bring dramatic shifts in property values as well as a redistribution of property (land owners are forced to sell their property to the government at a price set by the government). In the cities, freeways blight some areas and cause others to be more valuable and they almost always raise the value of the suburban areas which they serve. Wealth redistribution is also a potent source of conflict but such transfers are inevitable in a growing economy where economic fortunes shift with the shifts in the relative importance of different kinds of goods, services and general social goals.

VI. Conflicts and Values

The above section shows how economic change means a redistribution of the control of resources and the rise and fall of the economic power of different interest groups. Economic conflicts often involve more than just the personal fortunes of members of a special interest group--railroads versus the truckers and airlines. Attitudes about conflicts reflect one's values which, in turn, affect and are affected by one's position in the economy and from one's value system. Managers of large corporations view economy differently from small businessmen, and members of labor unions see things in a different light than do doctors and dentists. The members of each major economic interest group tends to see the nature and purpose of the economic system in a particular way and to support a particular set of values.

A person usually has clusters of goals or values, some of which are more important to the person's VALUE SYSTEM. The conflicts which are most difficult to resolve occur between groups holding opposing and seemingly irreconcilable value systems. A good example of this type of conflict is that one between those in our society who want free enterprise and personal control over property with little or no government control, and those who believe in some form of socialism in which the major forms of capital are owned and operated by the public. Some groups believe passionately in economic freedom and are willing to have it at the cost of the progress of the society as a whole or the security of most of the groups in the society. Economic freedom has a high value for them and if they hold to this value with great passion we say that they are dogmatic in their beliefs. That is, economic freedom becomes a dogma--an unquestionable article of faith--upon which argument is impossible.

Resolving these conflicts is hard because individuals and groups have strong emotional attachments to the goals they seek. These disagreements are over the very nature of our economy and our national goals. These are the basic policies which determine the structure of the society. Because of their importance they deserve our special attention.

VII. Ideology and Conflict

Value conflicts are made severe and potentially disruptive and dangerous because every society fosters some degree of ETHNOCENTRISM--the belief that one's own social system is superior to all others. The ethnocentric person believes himself to be the best judge of the goodness of other societies because he uses his own, superior society as the basis for comparison. Other societies are superior to the extent that they are based on goals and values similar to one's own society.

The particular set of ideas, beliefs, or values that the members of a society share about their own social system is called an IDEOLOGY (i-de-ol-ogy) which is a combination of ideas and study. An ideology describes the characteristics of the ideal society on which one's society is patterned and it states the reasons people believe their own society to be superior to others. That is, a nation's ideology is its justification for its ethnocentrism, the justification for the feelings of national proce by its members.

When one is justifying an emotional attachment to something (or someone) one does not look for its faults. A daughter seeking the permission of her parents to marry a particular young man tells them of his charms, kindness, honesty, etc., and tends to ignore his weaker points. When we voice the ideological justification of our economic system, we do not speak negatively of a mixed-economy with progressive trends towards more and more planning; rather we speak of capitalism and American free enterprise as an ideal.

Freedom is a central valve in our culture and this valve is greatly strengthened by our economic system. A necessary condition of the free enterprise system is the right to own and to buy and sell private property. In actuality, our freedom to own and to buy and to sell property is limited in many ways, but nevertheless, our economic ideology describes the private free enterprise capitalism, emphasizing freedom of economic activity. Just the reverse is true in the Soviet

Union. In Russia, the official ideal is pure C mmunism--a highly productive, classless society where government is no longer necessary and where there is no provate property; rather, workers' communes cooperate voluntarily to produce and distribute goods and services to each person according to his need.

Ideological commitment of a nation's citizens is, of course, highly desirable; it is a source of strength and pride for all, and it also is a necessary social cement which provided strength and commitment of the citizens to work for national goals. At the same time, ideologies too rigidly held inhibit an understanding of one's total society and all other societies as well--rigidities which could further magnify differences between nations and frustrate cooperation between nations.

VIII. A Model for Conflict Analysis

No matter how opposed are the values of the economic interest groups in our society, the differences have to be reduced sufficiently to avoid violent conflict. If we are interested in finding wise and efficient solutions to these conflicts, it is important to clarify the nature of issues and to define exactly where conflict lies--to analyze the basic differences--so that any unnecessary misunderstanding can be avoided. Once the real differences in interests are identified, it is possible to look for a solution.

Any conflict of interests can be analyzed to identify the major issues being disputed. In almost every conflict in shich the parties express themselves in words, there will be issues of fact, of definition or prediction or interpretation, and of values. That is, there will be disagreements about the actual facts (what happened), over definitions, (what do you mean?) over what each party predicts will result from a certain action, and, finally, over what is right or just. If the first three sets of issues can be clarified to the satisfaction of the opposing parties, the fourth--the value conflict--becomes clear and can often be more amicably resolved.

In Wonderland, Alice was constantly challenged by the Wonderland creatures because she did not make sense to them. The fault, she charged, lay with _them_ because _she_ used words properly. "People," she said, "should mean what they say, and say what they mean." We could all avoid a lot of trouble if people could abide by Alice's philosophy. One of the ways that would help bring this about is to clear up the issues of definition--how words are going to be used. It is a harder task to get agreement over questions of prediction because we cannot observe the future. However, this is the area of disagreement where economists can be helpful. It is their job to predict the effects of alternative policies.

If the issues of fact, definition and prediction are clarified, then the value conflict becomes clear, and the parties to the dispute have a sound basis for determining what can be compromised and what cannot be compromised. If both parties know what is at stake, they can calculate the alternative costs of different concessions. If they know the priorities of demands of their adversaries they can bargain for an agreement in which they can successfully trade off one concession for another. Or, they are in a position to calculate the cost of continuing the conflict.

Assume, for instance, in a labor management dispute that the union is asking for an hourly wage hike of 20¢ per hour, a four-day work week, a guaranteed annual income for all current union members and an improved pension plan for retiring workers. Management offers 10¢ per hour, will not agree to the workweek or the guaranteed annual income, grants half of the improved pension benefits, and demands complete power to alter job assignments and lay off workers when automated equipment is introduced. The union counters with the right to strike over disagreements about job reassignments and layoffs due to automation. Things look pretty messy, but if both sides can identify which demands are most important, they may be able to come to an agreement. Let's say in this case that management agrees to work out the introduction of automation with the union and to guarantee all union members continued employment. The union drops its demands for guaranteed annual income and the four day week on the grounds that a mutually satisfactory plan of job reassignment is worked out in the event of automation.

Of course, a further concern in a dispute of the sort described above is whether this agreement is in the public interest. What are the consequences of this agreement to the public welfare? Again, economic analysis is useful in determining public interest, for an agreement between adversaries is often reached at the expense of some other group which is not represented in the negotiations.

IX. Summary

The ultimate aim of our democratic society is to promote the general welfare. The economic aspect of this welfare is expressed in five economic goals affecting the allocation of resources: freedom, justice, progress, stability and security. Because individuals and groups disagree about the meaning of these goals, they are often in conflict over how scarce resources should be allocated. It is the function of democratic government to pursue policies which avoid controversy, if possible, and to settle disputes through decisions which promote the interests of the public and which satisfy those affected so that normal social activities continue.

Much of the difficulty in resolving conflicts arises when individuals and groups adhere dogmatically to a particular solution to a problem. Problems like these can best be solved if disagreements over facts, definitions of words, and predictions about future consequences can be eliminated so that the value issues are clearly evident. Hopefully a compromise policy can be reached which reflects a reasoned comparison of the preferences of those in conflict with the major alternative solutions to the problem.

Every society is characterized by its particular ways of making economic decisions--by its own unique customs, forms of government decisions and market bargaining. A common ideological dichotomy is made according to whether or not command (public control) or market bargaining (private control) is emphasized in economic decision making. The ideologies of free enterprise capitalism and socialism describes these types of economies in terms of an ideal, and the advantage of the ideal system forms the basis of the ideological justification of that type of economic organization.

Analysis of ideal economies can be very valuable because it permits one to start to develop a consistent value system and it gives one a frame of reference for comparing the operation of the real economy with that of the ideal. However, the fact that the ideal differs from the actual conditions complicates public debates over economic policy changes. Controversy about proposed policy changes are often blurred and intensified when the disputants create issues of fact and prediction by confusing the real economy with the ideal.

CHAPTER 7

A SUMMARY DESCRIPTION OF ECONOMICS

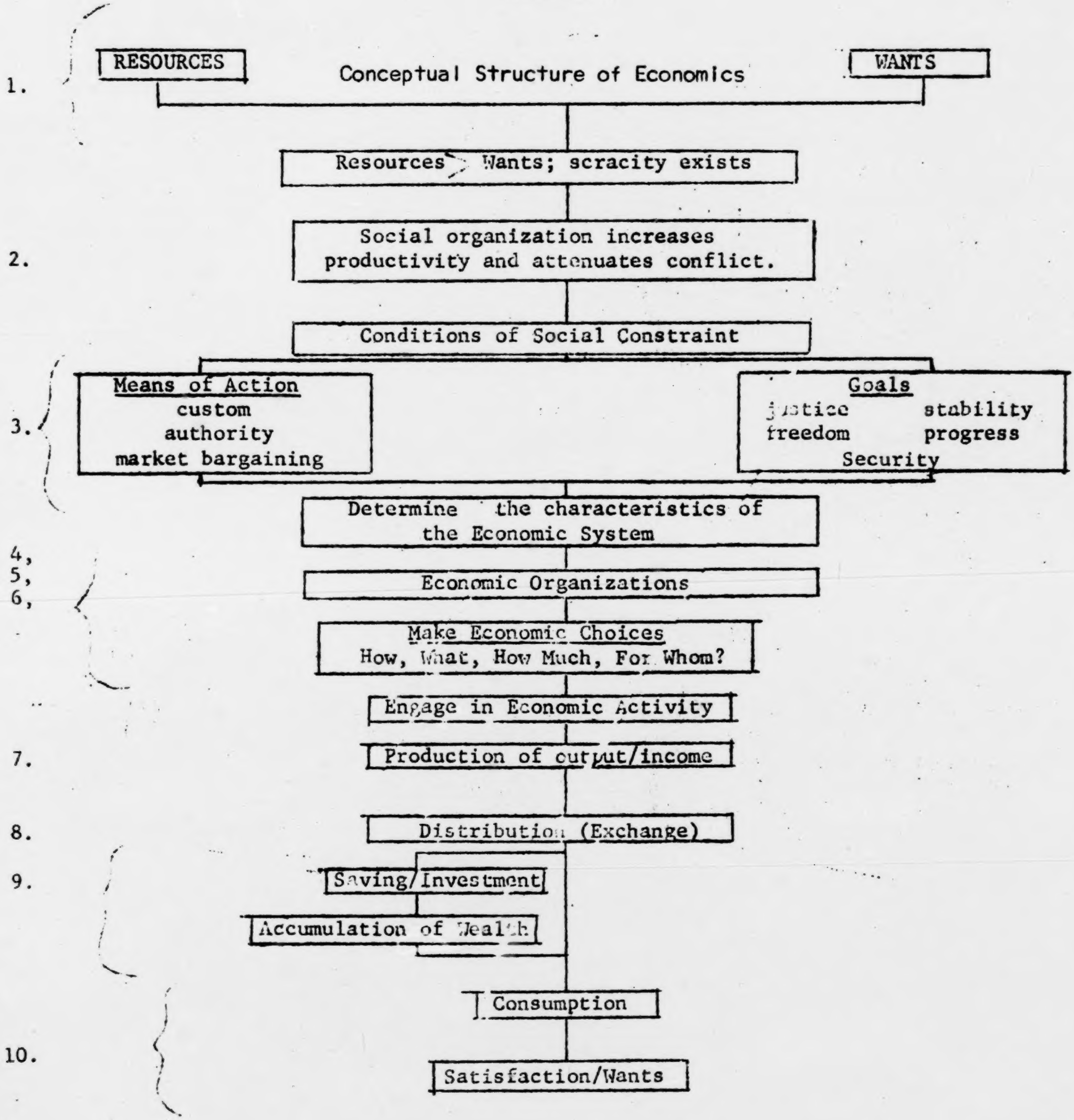
I. Looking Backward

Having completed Unit I, we are now in a position to review and to organize the material in a systematic way. Unit I has been concerned primarily with the presentation of a set of concepts and ideas which, when brought together, provide a frame of reference for studying economics. They are the conceptual structure upon which ECON 12 is based. This conceptual structure should permit you to see how all the parts of economics are related to each other and how economics relates to the physical and social world. There are, of course, other ways to organize the concepts of economics, but this will serve as a model of how the subject can be organized. The conceptual structure is presented in the two following diagrams.

Diagram No. I shows how the various concepts presented in Unit I are related. These relationships show that in ECON 12, the need to study economics arises from the condition of scarcity--the condition in which wants are greater than resources.

These concepts all come from the basic assumptions that scarcity exists, that conflicts over scarcity are normal, and that through social organization people try to increase production of want satisfying goods and services in order to attenuate these conflicts. On the page facing the diagram, these concepts are presented in a series of statements on how the concepts are related. All of these concepts and statements should be familiar to you by now. The chapter designation after the statement gives the chapter in which the idea was introduced. You can go back and review or question your instructor if the idea does not strike a bell.

DIAGRAM 1


RESOURCES
Conceptual Structure of Economics
WANTS
1.
Resources > Wants; scracity exists
2.
Social organization increases productivity and attenuates conflict.
Conditions of Social Constraint
3.
Means of Action
custom
authority
market bargaining
Goals
justice
stability
freedom
progress
Security
Determine the characteristics of the Economic System
4,
5,
6,
Economic Organizations
Make Economic Choices
How, What, How Much, For Whom?
Engage in Economic Activity
7.
Production of output/income
8.
Distribution (Exchange)
9.
Saving/Investment
Accumulation of Wealth
Consumption
10.
Satisfaction/Wants

Economics is the science which studies behavior as a relationship between ends and scarce means which have alternative uses. (LESSON I and 8)

The fact that at any one time human wants are greater than available resources creates a condition of scarcity and the need for people to organize into community life to make more efficient use of resources and to attenuate conflict.
(LESSON 2)

The cultural and physical environment establish the limits within which an economy functions. The forms of decision making (custom, authority and market bargaining) and the goals of society (the relative importance of justice, freedom, security and progress) determine the characteristics of an economy.
(LESSON 5 and 7)

Studying an economy means studying the society's system of economic institutions to determine how effectively the individual institutions perform their function in the system (micro-economics) and how effectively the total economic system (economy) operates to satisfy the people's material wants (macro-economics).
(LESSON 6)

A society's economic institutions are the total of group organizations which perform its economic functions: they make the four basic allocation decisions (what, how, how much and to whom) decisions about the use of scarce resources and, on the basis of these decisions they carry out the primary economic activities.
(LESSON 5)

The process of allocating scarce resources involves a normal condition of conflict. Economic organization attenuates and resolves conflicts and in so doing the economic organization changes to reflect the relative power of the contending economic interest groups. (LESSON 7)

Through specialization of production, societies make scarce resources more productive. The proof that specialization increases productivity is stated as the theory of comparative advantage, and the existence of a limit to the productivity of a resource is asserted in the law of diminishing returns.
(LESSON 3)

Production specialization necessitates distribution and exchange; money is needed to facilitate exchange. The dependence of people on money for purchasing power leads to the creation of forms of credit which further facilitates exchange by expanding people's purchasing power. (LESSON 4)

Through savings and investment a society creates and accumulates wealth (capital) which increases production of want-satisfying goods and services.
(LESSON 2 and 3)

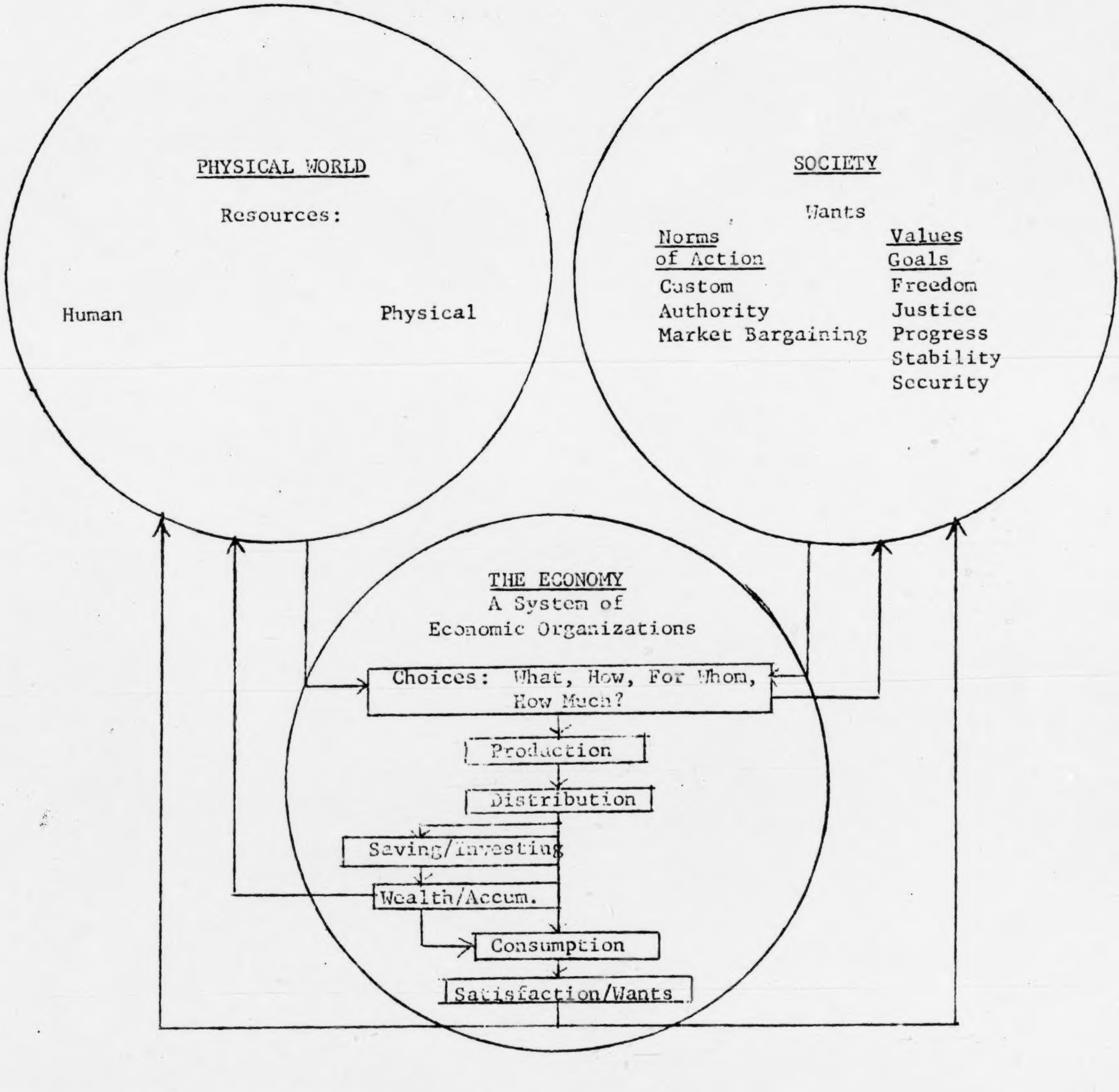
An economic system grows (accumulates capital) through a constant process of want satisfaction, want creation, and want satisfaction, etc.
(LESSON 2)

Diagram No. 2 shows most of the same concepts in another way. The purpose of this diagram is to show how an economy changes and grows so that a society can use its physical resources to satisfy the ever changing wants of the people making up that society. It shows how economic organization relates the physical world to society.

The circles are all the same circumference because, in a sense, they represent different ways of looking at the same thing--the earth, change in any one--the earth, the society, or the economy--changes the others. The arrows indicate the primary directions of change and the three worlds together describe a changing system. Changes generally also mean that the economy is growing and this diagram shows how a society, through savings and investment, accumulates capital and increases its productivity.

DIAGRAM 2

The ECON 12 Conceptual Structure as a model explaining Economic Change.


PHYSICAL WORLD
Resources:
Human
Physical
SOCIETY
Wants
Norms of Action
Custom
Authority
Market Bargaining
Values Goals
Freedom
Justice
Progress
Stability
Security
THE ECONOMY
A System of Economic Organizations
Choices: What, How, For Whom, How Much?
Production
Distribution
Saving/Investing
Wealth/Accum.
Consumption
Satisfaction/Wants

You should now be able to understand these diagrams and their contents and to use them to review Unit I. If you do, you will have the economic frame of reference you need to study the economic problems which are presented in Units II-IV. Diagram 3 shows how these ideas are related to the Units which follow. During the remaining part of the course you will probably have occasion to refer back to these diagrams on numerous occasions. Use them as your frame of reference for what you are studying. If ever you do not understand what you are studying or how it relates to economics, ask your instructor to return to the diagrams so that the class can identify where you are on them. In this way, you will not get lost or confused and the rest of the course will be much easier to understand.

DIAGRAM #3

ECON 12 Unit Organization

ECON 12 Units are designed around a framework of concepts which help students study economic organization. UNIT I introduces this basic conceptual structure and succeeding units build upon it to permit students to explore basic economic issues of our time.

UNIT I BASIC CONCEPTS	
1	Scarcity Choice, Conflict and Conflict Resolution
2	Organizing Production, Productivity, & Law of Diminishing Returns
3	Exchange, Money & Credit, Saving & Investment
4	Economic Structure of a Society: Modes of Decision Making, Economic Decisions, Economic Goals
5	The Economy as a System (The Circular Flow Model)
6	Economic Conflict & Conflict Resolution; Economic Efficiency and Change
7	Economics, Science and Social Science

UNIT II Microeconomics THE U.S. MARKET SYSTEM, STRUCTURE OF INSTITUTIONS: THEIR CONDUCT AND PERFORMANCE	
1 2	The Price System Economic Models
3	A Model to Predict Market Price
4	The Law of Supply and Demand
5	Pure Competition: Conduct and Long-Run Performance
6	Pure Monopoly: Conduct and Performance
7 8	Types of Imperfectly Competitive Markets: Structure Case Studies & Evaluation of Market Conduct & Performance
9	Income Distribution in the U.S.
10	Programs to Reduce or Alleviate Poverty
11	Labor Market Structure Conduct and Performance
12	American Capitalism: Performance Record and Future Prospects

UNIT III Macroeconomics	
1	Overall Economic Growth and Stability of the U.S. Economy
2	Measuring Economic Aggregates
3	Measuring GNP and GNI
4	The Multiplier. A Model to Predict the Rate of GNP & GNI
5	The Money Supply, Its Effect on Aggregate Demand and Its Regulation
6	Monetary and Fiscal Policy for Growth and Stability
7	The Effects of International Trade on the Economy
8	The Self-Regulatory Power of the U.S. Economy

UNIT IV OTHER SYSTEMS	
1	Growth Strategies and Prospects for Underdeveloped Economies; Case Studies and General Evaluation
2	Russian Economic Planning

II. Concluding Remarks--A General Definition of Economics

By now you should know that economics is the study of the way people make decisions and organize into groups to use scarce resources. The purpose of this final section is to further clarify your understanding of economics by arriving at a more precise definition which will permit you to distinguish between what is and what is not economics.

For this purpose we will analyze a famous definition made by the English economist, Lionel Robbins:

> "Economics is the science which studies behavior as a relationship between ends and scarce means which have alternative uses."

This is a very broad definition, but it is useful because it pinpoints four important characteristics of economics: (1) it is a science; (2) it is a science which studies social behavior (it is a social science); (3) the subject of study is human behavior as a relationship between ends and scarce means; (4) the scarce resources have alternative uses. Thus, this definition describes economics as a science--a study which uses scientific methods. In addition, it defines the subject of economic scientific study as any human behavior related to allocating resources among alternative uses.

Economics as a Social Science

The sciences are divided into two broad groups: (1) the physical and natural sciences (2) the social or behavioral sciences. All of these sciences study behavior of physical particles--physics, chemistry and geology fall in this category. Increasingly the physical and natural sciences are being merged in such studies as bio-physics or bio-chemistry, that is, biology + physics, or biology + chemistry.

The social sciences study the behavior of human beings in a social setting, that is, people in group activities. The social sciences include economics: anthropology, sociology, political science, etc. the boundaries between these sciences are historical but, just as with the physical sciences, the boundaries are becoming less distinct and the studies are merged. Brief definitions of the major social sciences are as follows:

Anthropology - the study of the physical and cultural characteristics of man--particularly in primitive societies.

Political science - the study of government and political power.

Sociology - the study of society, the forms of groups within the society, the interaction of these groups with one another and the norms of behavior common to the society.

Social Psychology - the study of the individual in relation to others--including how his behavior affects and is affected by behavior of groups.

The social sciences overlap as in social-psychology, or political-sociology. The reason for the overlap is the same as in the natural sciences--each science is studying the same behavior but from different viewpoints. For example, the family is a group whose behavior is of interest to the political scientist (how will its members vote?), to the psychologist (what are the personal interactions within the group?), the sociologist (how does it function with other groups in society?), and the economist (what does it earn, save, invest, and consume?).

In fact the current, accepted definitions of the different social sciences describe the current boundaries of the science, what scientists in that field usually study. On the other hand, Robbins' definition of economics is important because it is so broad--it defines the subject of economics as any human behavior related to the alternative use of scarce resources.

Economics as a Science

A science is any area of knowledge in which the results of the investigation have been logically arranged and systematized in the form of hypotheses and general laws subject to verification. Whether or not an area of study is considered a science depends on whether scientific methods and attitudes of study are employed by the student. The definition given above implies that the scientist is motivated to increase knowledge about something and to make it available to others who may wish to study the same thing. Essential to scientific study is interest in learning more and in recognizing that any present knowledge may be discredited by future investigations which uncover new facts. Also essential to science is the desire to be systematic, to uncover general propositions about how groups, people, animals, molecules behave. Finally, scientific activity is community activity. Scientists depend on each other for information about new facts, new laws, new insights.

The ability to predict behavior--human or non-human, organic or inorganic--is a necessary attribute of any science. Obviously, it is difficult to predict an event with complete certainty unless the conditions in which the event is to occur are made specific. Describing the conditions and organizing the data upon which the prediction depends requires careful procedures. Whenever one is going to predict human behavior, it is important to specify as closely as possible, the conditions in which the behavior will occur. Otherwise, it would be impossible to isolate those things which actually cause the event to occur.

"The scientific method" is the phrase used to denote the orderly procedures which scientists follow to make accurate observations of behavior and accurate predictions. Methods differ from science to science, depending on what is being studied, but these scientific methods consist of procedures like the following:

1. The scientist begins with an idea about the thing he is going to study. Usually the idea is in the form of a question or problem. Economists often derive these hunches from constructing and studying a model of the real thing being studied.

2. Next, he makes an informed guess as to, what the answer is and this is his working hypothesis. [high-poth -e-sis]. An hypothesis is simply a prediction which is used as a guide to further investigation.

3. The working hypothesis allows the scientist to determine what new data (facts or information) will help to solve the problem. As more and more data is gathered, he changes his working hypothesis.

4. Finally, as more data is gathered, he will be in a position to state his hypothesis as a precise prediction and test to see if it is correct.

5. If his prediction is correct, he can state the hypothesis as a valid theory. If it is not correct, then he must re-examine the data he has gathered, or gather more data, and restate the hypothesis and test it again. He must continue this process until he can state a valid theory upon which predictions can be made.

Major Areas of Economic Study--Pure and Applied Micro and Macroeconomics

Professor Robbins' definition is complete but it is still too general for practical use. For example, there are many things besides natural resources, labor and capital which people find scarce. To most of us there is not enough love or friendship to satisfy our desires. Other men want prestige and power which by their very nature must be scarce. If everyone were equal socially and politically, could there be any prestige or power? Certainly, the tools of economics are not designed for a scientific study of love, prestige, or power. Clearly, if the definition is to cover economics as it has been used throughout this first Unit, then the Ends must be those which can be satisfied by the goods and services produced through organizing human and nonhuman natural resources.

Economics then, is the science which studies social behavior involving relationship between wants, (which can be satisfied by goods and services) and the scarce natural resources and capital, all of which have alternative uses.

Given this definition, it is possible to specify that economics is concerned with the human behavior men exhibit in such institutions as families, business firms, labor unions, and government agencies when they are making decisions on:

1. What to produce?
2. How to produce it?
3. How much to produce?
4. To whom the product should go?

Studying one of these institutions alone or how two or more of them relate to each other, is called MICRO-ECONOMICS because the study deals with a small part of the total economic system. Studying how all of the institutions function together as a total economic system, is called MACRO-ECONOMICS. Thus, a study of how prices are determined in a single market is micro-economics. A study of how prices in every market would be affected by a tax increase in macro-economics.

Finally, we can divide economics into pure and applied economics. PURE ECONOMICS, whether it is micro or macro-economics, is concerned only with describing, explaining, and predicting the behavior being studied. When an economist is doing pure research, he is only concerned with how and why an industry operates in a particular way, or how and why the economy responds in a particular way to a change in interest rates. He is interested in increasing our knowledge of the subject.

APPLIED ECONOMICS goes beyond pure economics in that it applies the knowledge of pure economics to the solution of practical problems. If an industry is characterized by too many monopoly practices, the federal government would ask economists to advise it on what changes in its anti-trust policies would lead to increased competition in the industry. Or, if prices were rising too fast, the federal government would seek advice on how interest rate changes might be used to stabalize prices. In both of these applications of pure economics, the economists are asked to recommend changes in economic policy which will bring about desired changes in behavior. In this, they are asked not only to predict events but also to help make economic decisions which will affect economic behavior.

Scientific methods are useful in learning about and solving any problem in economics. For example, if a large school district wanted to establish special programs for potential high school drop-outs and the cost had to be determined so that the amount could be included in the budget, there would be various questions which would have to be answered. First, it would be necessary to predict how many drop-outs there would be, second, how would these potential drop-outs be identified, third, what kind of program would be effective in keeping them in school, and so on. If you were given this problem, you could use the scientific method to solve it. This means that you would have to come up with some ideas of what data you would need, gather data, make hypotheses, and continue the process until you had an accurate method (theory) of predicting how many potential drop-outs there would be, of identifying them and of diagnosing their needs so that a program for keeping them in school could be designed. This is a problem in applied economics which requires both pure economic study to help identify effective alternative courses of action.

UNIT I READINGS

Unit i
Lesson I
Readings

ECONOMIC CONFLICT IN AMERICA - LABOR VS. MANAGEMENT

One of the clearest, the most continuing and significant economic conflicts in the United States has been between employees and their employers over the right of workers to organize unions and to determine wages and conditions of employment through collective bargaining negotiations. Collective bargaining refers to negotiations about wages and working conditions between employees and a union representing some group of workers.

Today the right to organize unions and to engage in collective bargaining is guaranteed by Federal Law to almost all employees (exceptions include agricultural workers, civil servants and domestic servants.) The basic law on labor relations is the Nation Labor Relations Act of 1935. It legalized labor unions and set up the National Labor Relations Board (NLRB) to enforce the law by prosecuting employers who used "unfair labor practices" to discourage their employees from organizing unions.[1]

The following readings are documents which mark the beginning and end of the struggle of unions for legality. Readings 1 and 2 are from the first important legal battle over union rights in our history. This was the famous shoemakers case of 1806 in which the court ruled that unions were illegal conspiracies in restraint of trade.[2] From 1806 to 1935 most union activity was considered illegal or else left unprotected by federal, state, or local laws. Reading 3 is taken from the preamble to the National Labor Relations Act of 1935. This law declared that employers had to allow their employees to form unions and that collective bargaining was legal. In this way, Congress transformed what had once been considered an illegal restraint of trade into a legal restraint of trade.

---

[1] Additional background material is given in Reading 4, "Labor Unions in America, 1790-"1935."

[2] Anything which hinders anyone in buying or selling something is a restraint of trade. In this case it was a restraint of buying and selling labor. There are many legal restraints of trade (liquor stores can't sell alcohol to minors) but the government attempts to eliminate illegal restraints of trade by any private party.

BACKGROUND TO THE 1806 SHOEMAKERS STRIKE. This case, which reached the Pennsylvania courts in 1806, resulted from a strike against the master shoemakers by the journeymen shoemakers of Philadelphia. In this era a journeyman was a skilled shoemaker who had finished his apprenticeship. He owned his tools and hired out to a master-shoemaker. The master owned the workshop and provided the raw materials from which the shoes were made.

The strike grew out of changes in the shoemaking industry which affected the work relationships between the journeymen and masters. Traditionally, the masters had controlled all the steps in producing shoes. They bought raw materials, hired shoemakers, supervised their work, and sold the finished shoe to the public in their own retail shop.

As the cities and nation grew, so did the market for shoes. The masters ceased to sell directly to the consumer. Sales to consumers were taken over by retail merchants. At first this change did not affect the journeyman-master relationship but by 1790 the demand for shoes was growing so rapdily that the masters had trouble supplying all the shoes that were demanded. More efficient means of production were needed. The merchant-capitalist appeared in the industry and reorganized production. In a very little time the master became dependent on the merchant-capitalist. The increased number of retail stores brought the need for a shoe wholesaler and the merchant-capitalist became the wholesaler. After that, the master had to sell to the merchant-capitalist who then sold to retail shoe stores. In addition, because the merchant-capitalist had larger money sources than the masters, he could buy large quantities of raw materials at low prices. The merchant-capitalist became the raw material supplier to several masters. Usually the merchant-capatalist retained ownership of the raw materials and paid the master to work them into shoes.

As a consequence of these changes in the industry, the functions of the master shoemakers were reduced to 1) providing a workship and 2) hiring the labor (journeymen shoemakers and apprentices) to make the shoes. The only source of profit for the master shoemaker was the labor he employed. The ability of the merchant-capitalist to buy from many small masters increased competition among the masters. The masters responded to the need to cut costs in the only way possible, they cut wages and tried to hire cheaper labor--apprentices, men who had not qualified as journeymen, women, and children.

The journeymen shoemakers fought back by organizing a union. Union members would not work for masters who hired cheap labor. Also, when the merchant-capitalist forced prices down and squeezed the masters too much, the union journeymen retaliated by going on strike and cutting off the supply of shoes.[3]

These were the conditions in the Philadelphia shoe industry in 1806 when the shoemakers union struck against the masters. The shoemakers were charged with criminal conspiracy (an agreement of two or more persons to do an evil act together) and on this charge its members were tried and convicted.

The following two readings present the case for and against the shoemakers. The first reading is the shoemakers argument which they placed in a Philadelphia newspaper, the Aurora; the second reading is taken from advice to the jury by the judge who openly sided with the masters and directed the jury to find the shoemakers guilty.

---

[3] When employees strike, they stop working and try to keep anyone else from taking their jobs. If they are successful, production is stopped.

Reading I
Lesson I

THE SHOEMAKERS DEFENSE*

*John R. Commons, *et. al*., History of Labour in the United States, Vol. I, The Macmillian Company, Copyright, 1918 and 1946, pp. 141-2.

The shoemakers, upon indictment, appealed the case to the public and published the following vindication in the Philadelphia newspaper, the *Aurora*.

> "In the constitution of this state, it is declared . . . 'that the citizens have a right in a peaceable manner to assemble together for the common good.' For fifteen years and upwards we have assembled together in a peaceable manner and for our common good, and to guard against the accidents to which industrious men are exposed to promote the happiness of the individuals of which our little community is composed, and to render service to those whom age or infirmity may have rendered incapable of labor. . . . The master shoemakers, as they are called after the slavish style of Europe, but who are only the retailers of our labor, and who in truth live upon the work of our hands, are generally men of large property, to whom the suspension of business, though it is a loss, is not so great a loss as the total suspension of the means of subsistence, is to us who obtain our income from week to week. These masters as they are called, and who would be masters and tyrants if they could, or the law would allow them, have their associations, their meetings, and they pass their resolutions; but as they are rich and we are poor — they seem to think that we are not protected by the constitution in meeting peaceably together and pursuing our own happiness. They suppose that they have a right to limit us at all times, and whatever may be the misfortune of society, the changes in the value of necessaries, the encrease or the decrease of trade, they think they have the right to determine for us the value of our labor; but that we have no right to determine for ourselves, what we will or what we will not take in exchange for our labor. . . . If the association of men to regulate the price of their own labor, is to be converted into a crime, and libeled with the same reproachful terms as a design against the freedom of the nation; the prospect is a very sad one for Pennsylvania. . . . What we have here said, will inform the public, of our conduct, and will shew that under whatever pretences the thing is done, the name of freedom is but a shadow, if for doing, what the laws of our country authorise, we are to have taskmasters to measure out our pittance of subsistence — if we are to be torn from our fireside for endeavouring to obtain a fair and just support for our families, and if we are to be treated as felons and murderers only for asserting the right to take or refuse what we deem an adequate reward for our labor."[71]

READING NO. 2

"The Shoemakers Decision"

excerpted from John R. Commons, et al; A Documentary History of American Industrial Society, Vol. III, Arthur H. Clark Company, Cleveland, Ohio, 1910, pp. 228-31, 233-35. (Modern paragraphing has been added, together with explanatory footnotes.)

It is proper to consider, is such a combination consistent with the principles of our law, and injurious to the public welfare? The usual means by which the prices of work are regulated, are the demand for the article and the excellence of its fabric. Where the work is well done, and the demand is considerable, the prices will necessarily be high. Where the work is ill done, and the demand is inconsiderable, they will unquestionably be low. If there are many to consume, and few to work, the price of the article will be high: but if there are few to consume, and many to work, the article must be low. Much will depend too, upon these circumstances, whether the materials are plenty or scarce; the price of the commodity, will in consequence be higher or lower. These are the means by which prices are regulated in the natural course of things. To make an artificial regulation, is not to regard the excellence of the work or quality of the material, but to fix a positive and arbitrary price,* governed by no standard, controuled by no impartial person, but dependant on the will of the few who are interested; this is the unnatural way of raising the price of goods or work. This is independent of the number of customers, or of the quality of the material, or of the number who are to do the work. It is an unnatural, artificial means of raising the price of work beyond its standard, and taking an undue advantage of the public. Is the rule of law bottomed upon such principles, as to permit or protect such conduct. ¶ Consider it on the footing of the general commerce of the city. Is there any man who can calculate (if this is tolerated) at what price he may safely contract to deliver articles, for which he may receive orders, if he is to be regulated by the journeymen in an arbitrary jump from one price to another?[1] It renders it impossible for a man, making a contract for a ~~[illegible]~~ large quantity of such goods, to know whether he shall lose or gain by it. If he makes a large contract for goods to-day, for delivery at three, six, or nine months hence, can he calculate what the prices will be then, if the journeymen in the intermediate time, are permitted to meet and raise their prices,[1] according to their caprice or pleasure? Can he fix the price[2] of his commodity for a future day? It is impossible that any man can carry on commerce in this way. There cannot be a large contract entered into, but what the contractor will make at his peril. He may be ruined by the difference of prices made by the journeymen in the intermediate time. What then is the operation of this kind of conduct upon the commerce of the city? It exposes it to inconveniences, if not to ruin; therefore, it is against the public welfare. ¶ How does it operate upon the defendants? We see that those who are in indigent[3] circumstances, and who have families to maintain, and who get their bread by their daily labour, have declared here upon oath, that it was impossible for them to hold out;[4] the masters might do it, but they could not: and it has been admitted by the witnesses for the defendants, that such persons, however sharp and pressing their necessities, were obliged to stand to the turn-out,[5] or never afterwards to be employed. They were interdicted from all business in future, if they did not con-

---

1. The price which the journeymen wished to set was the price of their labor, that is, their wages.

2. The price here is the price the manufacturer who employes the journeymen shoemakers charges for the shoes he sells.

3. Indigent is poor or without money.

4. To hold out is to stay out on strike.

5. To stand to the turn-out meant to go on strike in obedience to the decision of the membership of the union.

tinue to persevere in the measures, taken by the journeymen shoemakers. Can such a regulation be just and proper? Does it not tend to involve necessitous[6] men in the commission of crimes? If they are prevented from working for six weeks, it might induce those who are thus idle, and have not the means of maintenance, to take other courses for the support of their wives and children. It might lead them to procure it by crimes – by burglary, larceny, or highway robbery! A father cannot stand by and see, without agony, his children suffer; if he does, he is an inhuman monster; he will be driven to seek bread for them, either by crime, by beggary, or a removal from the city. # Consider these circumstances as they affect trade generally. Does this measure tend to make good workmen? No: it puts the botch incapable of doing justice to his work, on a level with the best tradesman. The master must give the same wages to each. Such a [145] practice would take away all the excitement to excel in workmanship or industry. # Consider the effect it would have upon the whole community. If the masters say they will not sell under certain prices, as the journeymen declare they will not work at certain wages, they, if persisted in, would put the whole body of the people into their power. Shoes and boots are articles of the first necessity. If they could stand out three or four weeks in winter, they might raise the price of boots to thirty, forty, or fifty dollars a pair, at least for some time, and until a competent supply could be got from other places. In every point of view, this measure is pregnant with public mischief and private injury . . . tends to demoralize the workmen . . . destroy the trade of the city, and leaves the pockets of the whole community to the discretion of the concerned. ~~If these evils were unprovided for by~~

6. Necessitous, here means to be without the necessary food, clothing, or shelter for survival.

. . . What has been the conduct of the defendants in this instance? They belong to an association, the object of which is, that every person who follows the trade of a journeyman shoemaker, must be a member of their body. The apprentice immediately upon becoming free, and the journeyman who comes here from distant places, are all considered members of this institution. If they do not join the body, a term of reproach is fixed upon them. The members of the body will not work with them, and they refuse to board or lodge with them. The consequence is, that every one is compelled to join the society. It is in evidence, that the defendants in this action all took a part in the last attempt to raise their wages; . . . ~~Keimer was their secretary, and the others were employed in giving notice, and were of the tramping committee~~. If the purpose of the association is well understood, it will be found they leave no individual at liberty to join the society or reject it. They compel him to become a member.

. . . ~~[177]~~ What is the case now before us? . . . A combination of workmen to raise their wages may be considered in a two fold point of view: one is to benefit themselves . . . the other is to injure those who do not join their society. The rule of law condemns both. If the rule be clear, we are bound to conform to it even though we do not comprehend the principle upon which it is founded. We are not to reject it because we do not see the reason of it. It is enough, that it is the will of the majority. It is law because it is their will – if it is law, there may be good reasons for it though we cannot find them out. But the rule in this case is pregnant with sound sense and all the authorities are clear upon the subject. Hawkins, the greatest authority on the criminal law, has laid it down, that a combination to maintaining one another, carrying a particular object, whether true or false, is criminal . . . ~~the authority cited from 8 *Mod. rep.* does not rest merely upon the reputation of that book. He gives you other authorities to which he refers. It is adopted by Blackstone, and laid down as the law by Lord Mansfield 1793, that an act innocent in an individual, is rendered criminal by a confederacy to effect it.~~

In the profound system of law, (if we may compare small things with great) as in the profound systems of Providence . . . there is often great reason for an institution, though a superficial observer may not be able to discover it. Obedience alone is required in the

~~present case, the reason may be this~~. One man determines not to work under a certain price and it may be individually the opinion of all: in such a case it would be lawful in each to refuse to do so, for if each stands, alone, either may extract from his determination when he pleases. In the turn-out of last fall, if each member of the body had stood alone, fettered by no promises to the rest, many of them might have changed their opinion as to the price of wages and gone to work; but it has been given to you in evidence, that they were bound down by their agreement, and pledged by mutual engagements, to persist in it, however contrary to their own judgment. The continuance in improper conduct may therefore well be attributed to the combination. The good sense of those individuals was prevented by this agreement, from having its free exercise. . . .

. . . .

They could not go farther than saying, no one should work unless they all got the wages demanded by the majority; is this freedom? Is it not restraining, instead of promoting, the spirit of '76 when men expected to have no law but the constitution, and laws adopted by it or enacted by the legislature in conformity to it? Was it the spirit of '79, that either masters or journeymen, in regulating the prices of their commodities should set up a rule contrary to the law of their country? General and individual liberty was the spirit of '76. It is our first blessing. It has been obtained and will be maintained . . .

. . . .

READING 3

THE NATIONAL LABOR RELATIONS ACT, 1935

"Section 1. The denial by employers of the right of employees to organize and refusal by employers to accept the procedure of collective bargaining, lead to strikes and other forms of industrial strife or unrest, which have the intent or the necessary affect of burdening or obstructing commerce....

"The inequality of bargaining power between employees who do not possess full freedom of association or actual liberty of contract, and employers who are organized in the corporate or other forms of ownership association substantially burdens and affects the flow of commerce, and tends to aggravate recurrent business depressions, by depressing wage rates and the purchasing power of wage earners in industry and by preventing the stabilization of competitive wage rates and working conditions within and between industries.

"Experience has proved that protection by law of the right of employees to organize and bargain collectively safeguards commerce from injury, impairment, or interruption, and promotes the flow of commerce by removing certain recognized sources of industrial strife and unrest, by encouraging practices fundamental to the friendly adjustment of industrial disputes arising out of differences as to wages, hours, or other working conditions, and by restoring bargaining power between employers and employees.

"It is hereby declared to be the policy of the United States to eliminate the causes of certain substantial obstructions to the free flow of commerce and to mitigate and eliminate these obstructions when they have occurred by encouraging the practice and procedure of collective bargaining, and by protecting the exercise by workers of full freedom of association, self-organization, and designation of representatives of their own choosing, for the purpose of negotiating the terms and conditions of their employment or other mutual aid or protection."

READING 4

The following reading describing the half-century of labor union history leading up to the passage of the National Labor Relations Act, is taken from John Herling, Labor Unions in America, Robert B. Luce, Inc. Washington, D.C., 1964, (pp. 21-25).

THE UNIONS COME INTO THEIR OWN

With the creation of the American Federation of Labor [1886], trade unions became an important part of the American scene. It was a period of spotty organization, of groping for a stronger hold where unions already existed. The country became aware of the union voice in the shaping of democratic society, even though the voice was not always clear, and was only one of many shouting to be heard. Almost from the start, the AFL made the campaign for an eight-hour day its major agitational and organizational cause. Through the Carpenters' and Miners' unions, workers were educated to the need to fight for a shorter working day.

With the first years of the new century, membership in unions steadily increased. Nearly all the labor organizations were craft unions, with the exception of the mine, garment, textile, brewery and shoe workers. In the last, craft distinctions were frequently maintained, although coordinated within the larger union. But the continual cycles of prosperity and depression continued to exact their toll from workers' organizations, though they did not destroy them. Each time a financial Panic swept the country, the strength and influence of unions declined, and their ability to bargain effectively with management suffered.

Employers continued to fight against the recognition of unions as legitimate bargaining agents for workers. Organization was, at best, intermittent. The history of one union after another was a record of defeats and sometimes of desperation, to the point where simple survival became the abiding goal. When strikes broke out, they were frequently accompanied by violence and bloodshed. Even when advances were slow in coming, the determination to expand as well as to consolidate persisted.

In New York City, the "sweatshops" of the garment industry, with their immigrant workers, became a national disgrace. Not only did the miserable conditions in the clothing workshops provide a particular challenge, they symbolized the need to improve the lot of the immigrant and to establish him as a first-class citizen. The struggle for union organization in the clothing trades thus carried with it a deep emotional quality: the passion for recognition of workers as employees, as Americans, and as human beings. As a result of the dramatic 1909 and 1910 strikes in the ladies' garment industry, important American labor history was made: the union was recognized, a protocol agreement was established to serve as a foundation for industrial self-government through union-employer contracts in an industry made up of hundreds of relatively small employers. The International Ladies' Garment Workers Union, and later the Amalgamated Clothing Workers Union, representing workers in the mens' garment industry, became the stabilizing elements in their industries. Another significant factor of this agreement was the acceptance of intervention by outside persons--private parties acceptable to both labor and management--who acted as intermediaries in developing peaceful understanding.

Such accomplishments were isolated victories, however. At best, the sporadic advances of unions, and their efforts at collective bargaining were offset by retreats in the fact of implacable employer hostility, governmental indifference and, all too frequently, by fear or lack of interest on the part of the workers themselves.

For the next two decades, which included the First World War--a period of union advance, followed by a period of decline--the unions persisted through a stubborn organizational will--and need--to live. Although the craft unions, as the sources of skilled labor, continued to operate with confidence, the pace of unionization in the large factories and mills of the mass-production industries continued to be slow and insignificant. In steel, coal and railroads, powerful corporations developed highly effective strategy against workers' organizations. Such efforts were successful not only because there was no government policy which encouraged unions, but because powerful employers could convert existing laws into union-crippling machinery. Supreme Court decisions also weakened or cancelled pro-labor legislation; the grounds for such decisions were invariably "unconstitutionality."

Some legislation did survive, however, and the picture began slowly to change. The Railway Labor Act of 1926 established procedures for bargaining between unions and management, for the handling of grievances in the industry and for the avoidance of strikes. For the first time, the unionization of railroad workers was legally protected against employer interference. Both employers and unions were required to "exert every reasonable effort to make and maintain agreements" negotiated through labor organizations which had the support of at least a majority of the workers concerned.

During the entire decade of the 1920's, unprecedented industrial prosperity had failed to reflect itself in workers' salaries or in union power and recognition. Indeed, the effect was quite the reverse. Emboldened by their financial success, more powerful than they had ever been before, large corporations and industries sought to suppress and discourage unionization. Many even went so far as to offer their workers benefits of various kinds--a practice that came to be known as "welfare capitalism." Some employers who offered such benefits were certainly motivated by considerations of decency; more often, they saw the benefits as new and highly effective means of combating unionization.

In 1929 came economic collapse, followed by the depression of 1930 to 1933, the most devastating in American history. Unemployment was pervasive; unions were fast losing their strength. Jobless men and women have no income with which to pay union dues. Most unions saw a rapid decline in membership. Yet, throughout this unhappy period, the core of the labor movement remained firm, at the same time that big business--no longer economically impregnable--

began to lose prestige. The confident assertions over the years that business leaders could alone preserve and push the economy to record heights, with consequent benefit to all, were tragically disproven. Employers for the first time found themselves on the defensive, and remained that way for some time to come.

With the election of Franklin Delano Roosevelt to the Presidency in 1932, labor entered a period of increased stature and influence. Roosevelt, in his "New Deal" reforms, made it plain that his administration did not think of organized labor as a menace, but rather as a creative and progressive aspect of the American economy and of American society. He fashioned a new political environment, in which legislation was passed giving unions equality before the law. Within this friendly climate of opinion, unions began to grow and develop.

Shortly before Roosevelt was elected, a law had been enacted which marked a significant gain for labor as well as a change in Congressional attitudes. The Norris-LaGuardia Act of 1932 stated in no uncertain terms that workers possessed the right of self-organization, and that the defense of free collective bargaining between labor and management was thereafter the public policy of the United States. Specifically, the Norris-LaGuardia Act broke down many of the barriers and restraints erected by the courts, which would frequently issue injunctions--restraining orders--against even the most normal and peaceful activities connected with industrial disputes. From now on the individual worker was to have "full freedom of association, self-organization, and designation of representatives of his own choosing, to negotiate the terms and conditions of his employment..." He was to be "free from the interference, restraint, or corecion of employers of labor, or their agents, in the designation of such representatives or in self-organization or in other concerted activities for the purpose of collective bargaining or other mutual aid or protection." From that time on, the courts were no longer used by employers as almost unilateral (one-sided) instruments for the suppression of organized labor.

READING 5

(This reading is quoted from "The San Francisco Chronicle," Thursday, Nov. 3, 1966. 'Science and Hunger A Growing Gap' by David Perlman, Science Correspondent.)

HUNGER AND SCARCITY

While hunger and malnutrition spread to new millions of explosively restless people each year, science keeps developing new techniques that would vastly increase the world's food supplies.

The production knowledge from the laboratory never seems to reach primitive farmers in time to stave off starvation; and if it does, barriers of politics, cost and ancient custom keep crop levels down and food quality poor.

Right now food output in Asia, Africa and Latin America is dropping disastrously; the food dole from surplus-growing countries is rising.

As a result, two-thirds of the world's people are hungry today, the newest estimates show. Fifteen per cent are badly undernourished; protein malnutrition is by far the most massive public health problem in the world.

The irony of hunger in a world of technological advance was underscored here yesterday at a meeting of the American Public Health Association, where experts discussed the hopes and barriers of adequate nutrition.

Dr. William R. Pritchard of the University of California at Davis described, for example, the many ways that exist for enriching the proten content of the world's diet.

In South America a concentrated product of cotton-seed meal, yeast, minerals and vitamins is being added to local grain flours. In South Africa the protein-poor corn diet of some areas is being enriched with a concentrate called Pro-nutro-made of peanuts, soybeans, fish flour and skim milk. Seed concentrates are potentially valuable everywhere--but little used.

The seas too are an abundant protein resource exploited badly, Pritchard said. Fish production could be doubled right away without endangering marine resources.

Technology could also be harnessed now to harvest the hundreds of millions of tons of protein-rich plankton in the seas, which are now used only here and there in Asian countries.

There's plenty of animal protein in the world, too, he added; the world's population, in fact, balanced.

But underdeveloped countries hold 60 per cent of the livestock but produce only 20 per cent of the milk, meat and eggs. The reason: failure to use scientific principles of disease control and animal husbandry, Pritchard said.

Only recently scientists at Purdue University discovered how to manipulate the genes of corn plants to increase their yield of protein nutrients by 70 per cent. Pritchard called this a "major technological breakthrough of immense importance."

Laboratory studies are now under way, Pritchard said, that bear promise of increasing supplies of edible protein. Some of these processes, he said, particularly those exploiting petroleum, might even double the world's protein supply--some day.

But the problem remains of feeding people now. And the barriers are tremendous, according to Dr. John C. Cutler of the Pan American Health Organization in Washington.

Take politics: Guatemala's government, Cutler noted, has slashed the incidence of goiter in the country from 30 per cent down to 7 per cent in four years, simply by iodizing salt. But in two other Latin American countries where the government has a salt monopoly, goiter is still a major problem. One government won't pay for the equipment; the other won't use it for fear of creating unemployment in its antiquated salt industry.

Illiteracy is a major barrier too: In countries where literacy has increased recently from 50 per cent to 80 per cent, food production has jumped seven-fold, Dr. Cutler said.

Education, transport, national trade policy and capital investment are all vital factors in feeding people, Dr. Cutler said.

Improvements in nutrition require planned development on a broad social and economic front. Large segments of the world's population must be brought into the 20th century."

READING NO. 1

"The Importance of Capital"
from Robert L. Heilbroner, The Making of Economic Society, Prentice-Hall, Inc., Englewood Cliffs, 1962, pp. 89-90

"...The key to higher output lies in enhancing the human energies of the community with the leverage of industrial capital. Our analytic understanding of growth must begin by looking further into this extraordinary power which capital possesses.

"... capital consists of anything which can enhance man's power to perform economically useful work. An unshaped stone is capital to the cave man who can use it as a hunting implement. A hoe is capital to a peasant, a road system is capital to the inhabitants of a modern industrial society. Knowledge is capital, too—indeed, perhaps the most precious part of society's stock of capital.

When economists talk of capital, however, they usually confine their meaning to *capital goods*—the stock of tools, equipment, machines, and buildings which society produces in order to expedite the production process.* All these capital goods have one effect in common on the productive process: they all operate to make human labor more productive. They make it possible for a worker to produce more goods in an hour (or a week, or a year) than he could produce without the aid of that capital. Capital is therefore a method of raising per capita *productivity*, which is an individual's output in a given span of time. For example, in a forty-hour week a typical modern worker using power-driven mechanical equipment can physically outproduce three men working seventy hours a week with the simpler tools of a half century ago. To put it differently, in one day a modern worker will turn out as much output as his counterpart of 1900 in a full week—not because the modern worker works harder, but because he has at his command thousands of dollars worth of capital equipment rather than the few hundred dollars worth available to a worker in 1900.

---

* Is money capital? It certainly is to the individual who possesses it. But it is not capital for society as a whole. For money only represents claims to society's real wealth, which is its goods and services. If an individual's money disappears, he loses his claim on those goods and services, and we can indeed say that he has lost his "capital". But if all money disappeared, we could not say that society had lost its claim on its own wealth. It would only have to devise another system of tickets.

Why does capital make labor so much more productive?

The most important reason is that capital goods enable man to use principles and devices such as the lever and the wheel, heat and cold, combustion and expansion in ways that the unaided body cannot. Capital gives men mechanical and physico-chemical powers of literally trans-human dimensions. They magnify enormously his muscular strength; they refine his powers of control; they endow him with endurance and resilience far beyond those of the flesh and bone. In using capital, man utilizes the natural world as a supplement to his own feeble capacities.

Another reason for the augmentation of production lies in the fact that capital facilitates the *specialization of man's labor.* A team of men working together, each man tending to one job alone in which he is expert, can usually outproduce the same number of men, each of whom does a variety of jobs. The prime example is, of course, the auto production line in which a thousand men cooperate to produce an immensely larger output of cars than could be achieved if each man built a car by himself. Auto assembly lines, of course, use prodigious quantities of capital in the overhead conveyor belts, the inventories of parts on hand, the huge factory with its power system, and so on. And while not all specialization of labor depends on capital, capital is usually necessary for the large-scale industrial operations in which specialization becomes most effective.

READING NO. 2

"The Nature of Capital"
from Eugen V. Bohm-Bawerk, *The Positive Theory of Capital*, G. E. Stechert & Co., New York, 1891, pp. 18-19

A peasant requires drinking water. The spring is some distance from his house. There are various ways in which he may supply his daily wants. First, he may go to the spring each time he is thirsty, and drink out of his hollowed hand. This is the most direct way; satisfaction follows immediately on exertion. But it is an inconvenient way, for our peasant has to take his way to the well as often as he is thirsty. And it is an insufficient way; for he can never collect and store any great quantity such as he requires for various other purposes. Second, he may take a log of wood, hollow it out into a kind of pail, and carry his day's supply from the spring to his cottage. The advantage is obvious, but it necessitates a roundabout way of considerable length. The man must spend, perhaps, a day in cutting out the pail; before doing so he must have felled a tree in the forest; to do this, again, he must have made an axe, and so on. But there is still a third way; instead of felling one tree he fells a number of trees, splits and hollows them, lays them end for end, and so constructs a runnel or rhone which brings a full head of water to his cottage. Here, obviously, between the expenditure of the labour and the obtaining of the water we have a very roundabout way, but, then, the result is ever so much greater. Our peasant needs no longer take his weary way from house to well with the heavy pail on his shoulder, and yet he has a constant and full supply of the freshest water at his very door.

. . . every roundabout way means the enlisting in our service of a power which is stronger or more cunning than the human hand; every extension of the roundabout way means an addition to the powers which enter into the service of man, and the shifting of some portion of the burden of production from the scarce and costly labour of human beings to the prodigal powers of nature.

READING 3

These are readings that describe how round-about production works in two important U.S. industries, automobile manufacture and telephone communications (remember that round-about production means that several stages of production are required to create finished goods). In the pursuit of greater effeciency and higher profits businesses tend to integrate (bring together) round-about production: one business firm is involved in several different but related production activities.

Vertical integration is the term that describes companies which own or operate a number of establishments carrying out at least two of the stages of production of a final product. Thus, the U.S. Steel Corporation mines its own ore, ships it across the Great Lakes in its own fleet, smelts it, and fabricates steel ingots into a wide variety of steel products.

Horizontal integration exists when one business firm produces a wide line of related goods. Producing several items is often more efficient than producing just one: costs can be reduced by making use of what would otherwise be waste; the same sales force can sell a whole line of products, and seasonal variations in production and use of the fixed plant and equipment can be reduced by producing items whose peak sales come during different months. Perhaps even more important, a firm produces a line of goods or services so that the firm's profits are not dependent on one product (don't put all your eggs in one basket).

A holding company is a corporation which owns (holds) stock in several other corporations. Often a holding company does not produce anything directly; its business is to manage these other operating firms. Often vertically or horizontally integrated firms are organized as holding companies.

AUTOMOBILE MANUFACTURE, A MASS PRODUCTION INDUSTRY

The automobile industry is a classic example of mass production. More than fifty years ago, Henry Ford applied the assembly-line principle to car production. Instead of building one car at a time in a stationary location, the parts were added one by one to car chasses as they were moved through the plant past the waiting workers. The production of 10,000 low-priced Model T cars in 1909 marked the real beginning of quantity production.

Car manufacture begins on the drawing board. A design is finished about two years before the model appears on the market. An experimental model is built, subjected to laboratory and road tests, and corrections are made before the design is released to the production departments. Before the actual automobile production can begin, the patterns, dies, machine tools and the necessary fixtures used in making auto parts must be produced.

Machining the automobile parts requires extensive foundry equipment as well as special-purpose machine tools to do the necessary metal cutting, castings, forging, stamping, welding and heat treating. Castings are used to make a number of intricately-shaped parts, from the cylinder block to the radiator ornament. Crankshafts, camshafts, gear blanks, connecting rods, valves and steering-gear parts are usually forged from steel. Hundreds of parts are formed by stamping presses, such as fenders, frames, gasoline tanks, fans, wheels, crank cases, rear axle housings, lamp parts, and dust shields. Many stampings are welded to form the body and its parts. The crystalline structure of steel is changed by heat treating to obtain the desired properties of hardness, toughness and strength. Finally, all these separate parts are shipped in finished form to the assembly plants around the country.

The modern, automated assembly plant (covering several acres) is a jet-age version of Ford's original 1909 production line; Henry Ford would gasp at the sight of it. Assembling the more than 15,000 parts that go into a modern automobile is like putting together a giant mechanical jigsaw puzzle. A central scheduling unit of computers programs each car through the four main assembly areas--body, paint, trim and chassis. Through precisely-coordinated organization and plit-second timing, parts and sub-assemblies meet on the final line at just the right moment to make each car exactly as ordered.

When Ford produced the Model T, all were identical, down to the black paint; Ford's only concession to consumer preference was to say, "They can have any color they want as long as it's black." The rainbow of colors competing on our highways is evidence that mass production has learned something about satisfying consumer preferences.

It was as an assembly operation that the auto industry began at the turn of the century. Independent firms, for the most part, manufactured and supplied the engine and body parts. When producers began to accumulate profits, they started to manufacture their own parts. However, even today the auto manufacturers do not manufacture all the parts themselves. They prefer to maintain two sources of supply as a precaution against total interruption in the supply of any one component part. They keep their own parts factories operating at a predetermined output rate and fill in the additional supplies they need from "contract suppliers." The following list of General Motors Divisions illustrates the extent to which general Motors owned supplying firms in 1963.

Auto manufacturers have dealer outlets to distribute their products in local communities. Most dealerships are independent businesses operating under sales agreements with an auto company. Under such agreements, the manufacturer sells exclusively through a limited number of dealers in a specified area. In return for giving this franchise privilege, the automobile producers set sales quotas and prices, and specify the showroom and repair facilities their dealers must maintain. In some instances, they provide part of the capital funds necessary to run the dealership.

The automobile industry is a highly concentrated market; that is, a few firms sell most of the cars. In 1965, General Motors produced 53 per cent of the cars manufactured in the U.S., as contrasted with 27.5 per cent for Ford, 15.7 per cent for Chrysler, and 3.7 per cent for American Motors. General Motors is not only the largest auto producer, it is also the largest corporation in the United States and in the world. Regularly, it has ranked first in the Fortune listing of the 500 largest industrial corporations. In 1965, its total annual sales were in excess of 20.7 billion dollars, an amount larger than the gross national product of all but a dozen countries in the whole world. An indication of tragic inequalities between the"have and "have not" nations is dramatically revealed in the fact that the combined output of the 54 smallest members of the United Nations (almost half the total membership) is just slightly higher than the output of this one American corporation.

LESSON 3 READINGS

READING NO. 1

THE NATURE AND IMPORTANCE OF INC.: Corporations in the U.S.

Baseball, Coca-cola, ice cream, Westerns, come instantly to mind when we think of the American "way of life." More important than any of these and influencing all is the corporate type of business. Since the beginning of this century, corporations have become the American economic "way of life" because more than half of the nation's income is generated by corporations, small, medium and large. This impressive amount is paid out as salaries to employees, as interest to creditors, dividends to shareholders, and taxes to the government. The worth of physical plants and other assets owned by corporations are of the same magnitude: half a trillion dollars, or about a third of our total national wealth.

Corporations are most important in industry where investments are heaviest. Virtually all public utilities and transportation businesses are corporations, and corporations account for 95% of value added to final output by manufacturing companies. Here corporations are concentrated in markets producing goods for national and international distribution. Whereas the non-incorporated manufacturing firms represent a small part of this sector of the economy and produce mainly for limited or local markets, only 10% of our agricultural producers are corporations, and services--restaurants, hotels, retail stores, beauty parlors, barber shops--are largely unincorporated. About half the retail and construction trades are incorporated, and most professionals such as lawyers, accountants and doctors are self-employed. Although the majority of corporations are relatively small (they have assets under $1 million), they are relatively unimportant for they own less than one-fifth of the corporate wealth. The overwhelming bulk of corporate investment, therefore, is in those industries which require huge inputs of capital--transportation, communications, mining and mass production manufacturing of steel, automobiles, chemicals and petroleum.

What are these giants that have contributed so greatly to our soaring wealth? Stated in the most general terms, a corporation is simply a business enterprise chartered by the state. The corporation comes into existence through the initiative of its directors who submit a charter of incorporation to the secretary of state of the state where they wish to locate their home office. The charter specifies what the corporation's business will be, and, once granted, permits the corporation to issue stock certificates and bonds to finance its operations.

Corporations raise investment funds through EQUITY FINANCING (stocks) or DEBT FINANCING (bonds, notes, and other forms of borrowing). Equity financing means that the money is contributed by a corporation's owners. Thus, owning stock certificates means having part ownership in the corporation and sharing in its profits which are distributed as stock dividends.

Corporations are ficticious legal persons created by the state and, as such, are endowed with perpetual life. They exist until legally disolved, voluntarily by the owners or involuntarily by the creditors through bankruptcy. In a world where the only certainties are death and taxes, corporations have only taxes to fear. A corporation is distinct from its owners: it can sue and be sued without involving its owners in any way. Because the corporation is a legal person, the owners (stockholders) are not liable for debts or mismanagement of the corporation unless the corporation goes bankrupt and even then they have limited liability: the most they can lose is the actual amount they have invested in stocks These characteristics of corporations explain the French and British equivalents of our Inc.: in France, they put S.A. (Society Anonymous); in Britain, Ltd. (limited liability).

The widespread popularity of the corporate form of business is based on the fact that it is a distinct legal person, and its legal characteristics make it easier for the corporation's financial officers to raise money to finance the enterprise. Investing in a corporation has definite advantages for the stock or bond holder: the investor incurs only limited liability; a person can divide money to be invested among a variety of different kinds of corporate business enterprises; there is a choice of kinds of stocks and bonds; finally, he can sell stocks or bonds at any time to any person willing to buy them.

Even with the advantages incorporation offers, it is never easy to raise large sums for a new and untried venture. That is why today most established firms choose not to distribute all their profits as dividends to the stockholders, but rather choose to keep some profits to finance their new ventures. New corporations, on the other hand, must find money. Special middlemen (investment bankers and brokers) perform the service of selling corporate stocks and bonds.

A recent study by the Chase Manhattan Bank revealed statistics about the sources of corporate financing. Over a period of eight years (1946-1953), 150 billion dollars was spent by U.S. non-financial corporations to modernize and enlarge plant and equipment. Almost two-thirds, or 99 billion dollars came from "internal sources." Internal sources are the profits which are not distributed to stockholders and the cash reserves from depreciation allowances set aside to pay for replacing old plant and equipment. Of the remaining 51 billion, about half was raised by short-term bank loans and some 18 billion by issuing bonds or notes. Only 9 billion, six per cent of the 150 billion, was raised by issue of stock.[1]

Most of today's great corporations grew up around the turn of the century. Their growth required enormous amounts of money. The following readings describe the functions of the great investment bankers of that era, personified by J. P. Morgan.

The first is an excerpt from Thomas C. Cochran's, The American Business System (Harper and Row, 1957), p. 41. The second is a description of J. P. Morgan Company, taken from the Report on Concentration of Monies and Credit, by the Pujo Committee, February 28, 1913, House Report 1593 (Money Trust Investigation), 63rd Congress, 3rd Session.

---

[1] Hacker, Louis, M., American Capitalism, Van Nostrand, 1957, p. 184.

[illegible]

THE ERA OF BANKERS

(Excerpted from Cochran's The American Business System, Harper and Row, p. 41.)

By the early twentieth century many scholars and journalists believed that during their lifetime capitalism in the Western world had fallen under the control of bankers and financiers. As business grew larger and more corporate, the need for raising capital from the investing public brought the investment banker into prominence until by 1900 he was conceived to be the most important figure in a stage called finance capitalism.

The Rise of Investment Bankers

The rapid growth of big business after the Civil War brought an increasing volume of large-scale security offerings in a market where capital for investment was relatively scarce. Competing with many attractive forms of local investment that could be supervised personally by the investor, shares or bonds in remote enterprises were difficult to sell. Only the large investment firm with many contacts at home and abroad could readily dispose of a five or ten million-dollar issue.

Consequently, about a dozen large investment banking houses took over the initial underwriting of the financial needs of American big business. The bankers regarded their relation to the enterprises that contracted for their aid in much the same light as the family doctor regarded his patients. The investment banker floated the original securities that brought the corporation into actual life. When more money was needed for the growth of the young company, the same banker expected to be consulted about securing the sustenance. He prescribed the arrangements for corporate marriages and the creation of subsidiaries, and when, usually during depressions, the company became financially ill and could not meet its obligations, the banker recommended a plan for reorganization that would restore the patient to health. If corporate death occurred, through liquidation and the sale of assets at auction, the banker attended each phase of the proceedings, usually arranging the purchase of the remains by a group of bondholders.

For the marketing of sizable security issues the underwriting house would associate other large financial firms with itself in a syndicate. Each of the leading investment banks, such as J.P. Morgan; Kuhn; Loeb; Lee, Higginson; or Kidder, Peabody, had a group of "retail" outlets through which most of the securities reached the public. Banks, trust companies, and brokerage houses did the retail selling, but banks and trust and insurance companies also bought for their own investment portfolios. Consequently, it was important for the investment bankers to exercise influence in the affairs of these other financial institutions. In addition, considerable parts of the issue might be sold through cooperating investment houses, "correspondents" in London, Paris, Amsterdam, Berlin or other foreign money markets. Each of the big American firms, therefore, had to have important European correspondents or agencies. This somewhat informal worldwide financial network led to the term, generally used invidiously, "international bankers."

The New York Financial Community

At the same time that the public marketing of securities was increasing the business influence of the investment houses, the concentration of the head offices of the large companies in New York City was adding greatly to the size and power of a few commercial banks. From the deposits of oil, meat, and metal producers, the National City Bank, which had always specialized in the financing of raw materials, rose to a leading position in city and nation. Smaller in size, but almost equal in the financial importance of its chief depositors from the fields of railroads and industry, was the First National Bank of New York.

In addition to other metropolitan banks and trust companies, the four major life insurance companies were located in New York. Trust companies and life insurance companies were particularly good customers of investment bankers.

Inevitably the major sellers of securities, the great commercial bankers, and important depositors were drawn together, and the vigorous personality and sweeping financial ideas of J. Pierpont Morgan gave a structure and force to this community of interest that it might otherwise have lacked. Having failed in the early nineties to get railroadmen to control competition by voluntary agreements, he sized the opportunity offered by the ensuing depression to reorganize several regional railroad networks, and place his representatives on their boards. Believing that cooperation was the life of sound finance, he brought about a number of mergers in the industrial field, creating such giants as General Electric, United States Steel, International Harvester, and International Mercantile Marine.

The Morgan First National City financial group and the other old investment houses were not the only big interests in Wall Street. The same upsurge of inland production that had built up the great metropolitan banks had also produced many new general entrepreneurs - that is, men who controlled many companies, but whose occupation was buying, selling, and coordinating such ventures rather than taking an active part in routine management.

READING NO. 3

DESCRIPTION OF J.P. MORGAN AND COMPANY

(Excerpted from the Report on Concentration of Monies and Credit, by the Pujo Committee, February 28, 1913, House Report 1593 (Money Trust Investigation), 63rd Congress, 3rd Session.

J. P. Morgan and Company of New York and Drexel & Co. of Philadelphia are one and the same firm, composed of 11 members.

General Character of Business - it accepts deposits and pays interest thereon and does a general banking business. It is a large lender of money on the New York Stock Exchange. More especially it acts as a so-called issuing house for securities; that is, as purchaser or underwriter or fiscal agent, it takes from the greater corporations their issues of securities and finds a market for them either amongst other banking houses, banks and trust companies, or insurance companies, or the general public.

On November 1, 1912, it held deposits of $162,491,819.65 of which $71,968,421.47 was deposited by 78 interstate corporations on the directorates of 32 of which it was represented.

Summary of Directorships Held by These Members of the Group. Exhibit 132-B shows the combined directorships in the more important enterprises held by

Morgan & Co., the First National Bank, the National City Bank, and the Bankers and Guaranty Trust Cos., Morgan & Co. through voting trusts. It appears there that firm members of directors of these institutions together hold: One hundred and eighteen directorships in 34 banks and trust companies having total resources of $2,679,000,000 and total deposits of $1,983,000,000;

Thirty directorships in 10 insurance comapnies having total assets of $2,293,000,000.

One hundred and five directorships in 32 transportation systems having a total capitalization of $11,784,000,000 and a total mileage (excluding express companies and steamship lines) of 150,200.

Sixty-three directorships in 24 producing and trading corporations having a total capitalization of $3,339,000,000.

Twenty-five directorships in 12 public utility corporations having a total capitalization of $2,150,000,000.

In all, 341 directorships in 112 corporations having aggregate resources or capitalization of $22,245,000,000.

The following companies were organized by J.P. Morgan and Company or had members of the firm serving on the board of directors: Atchison, Topeka and Santa Fe Railway, the Chesapeake & Ohio Railway, The Chicago Great Western Railway, The Great Northern Railway, The New York Central Lines, The New York, New Haven & Hartford Railroad, The Northern Pacific Railway, The Southern Railway, The Southern Pacific Railway, General Electric, and International Harvester Co., Lockawanna Steel Co., Pullman Co., United States Steel Corporation, American Telephone and Telegraph Co., Consolidated Gas Co. of New York, Western Union and Telegraph Co., and the American Can Company.

READING NO. 4

FINANCING THE INFANT AUTOMOBILE INDUSTRY

(excerpted from A Financial History of the American Automobile Industry, by Lawrence H. Seltzer, Ph.D., Houghton Mifflin Company, 1928, pp. 19-24.)

Automobile Manufacture, Early Sources of Capital

There was no lack of initiative even at the very beginning of American automobile manufacture. By 1899, fifty-seven producing establishments were already in operation, and by 1904, this number had increased to 121. Few of the producers were endowed with more than meager resources; but both technological and financial factors made entrance into the business extremely easy, and expansion of output did not wait upon the direct commitment of large amounts of capital. Indeed, the growth of the American automobile industry was characteristically the expansion of originally small enterprises that obtained the bulk of their increasing capital from reinvested profits.

The early producers met the capital requirements of automobile production, in largest measure, by shifting the burden to owners of already existing capital equipment. The automobile was a new product chiefly as an assembled unit; its component parts were much akin to those of a number of other products. As a result of the previous development in the United States of the technique of standardized interchangeable parts manufacture - a technique which had been extensively employed by the sewing machine, bicycle, wagon, and other American industries - numerous establishments were in existence equipped with the tools, machines, and technical skill for the manufacture of wood and metal sub-products. Specialized automobile factories were therefore not essential. Orders for parts were given to scores of wood and metal-working enterprises; carriage makers were available for the manufacture of "bodies;" and the producers of rubber goods and electrical equipment soon added their contributions. The chief business of the automobile producer, after the design of his product and the placing of orders for parts was the assembling of the major components and the sale of the completed vehicle. The process of assembling was a short one; it required neither large plant nor elaborate equipment; and lands and buildings were as often rented as purchased.

Thus, the bulk of the fixed capital required for the production of automobiles was not provided by the producers themselves, but by the parts-makers; and the provision of this capital did not wait upon the willingness of its owners to assume the new and large risks of automobile production proper.

The working capital burdens of automobile manufacture were similarly shifted and distributed. The practice of purchasing parts made to order minimized the current financial requirements for wages. The process of assembling was not only short, but was often shorter than the credit period of thirty to ninety days allowed by the parts-makers. And the demand for automobiles was such that, in exchange for exclusive territorial rights for dealers and distributors, the automobile producers were able (1) to exact advance cash deposits of twenty per cent or more upon all orders; (2) to require full payment immediately upon delivery of the completed vehicle (sight draft being attached to the bill of lading); and (3) to ship cars immediately upon production, irrespective of current retail sales, according to a prearranged schedule with each selling establishment. Thus, Senator James Couzens, who was an active officer of the Ford Motor Company from its inception in 1903 until 1919, replying to some questions of the present writer, decleared:

> I recall that by a rule of the industry generally deposits from dealers were a requisite to their securing cars and this in itself accumulated quite a fund which could be used in manufacture. Of course, parts manufacturers extended credit and were paid in accordance with the usual terms in the industry.

Similarly, Mr. Roy D. Chapin, chairman of the board of directors of the Hudson Motor Car Company, and one of the pioneers of the industry, explained in substantially the following language the conditions under which the industry operated as late as 1909, when he, with a few others, founded the Hudson Company.

> It is said that the Ford Motor Co. started with $28,000. We started with much less than that...Dealers' deposits often paid half the sum necessary to bring out a full year's production, and if the assembling were efficiently directed, drafts against the finished cars could be cashed as rapidly as the bills from parts-makers came in...We sold directly to distributors from the first. We looked for individuals of substantial capital and financial responsibility who would be sure to fulfill their engagements.

Henry Ford was financed by a small group of Detroiters in 1902 under the name of the Detroit Automobile Company. Disagreeing with his associates, he joined another group for a short time, organized as the Henry Ford Automobile Company. Unsatisfied still, he succeeded in enlisting the aid of Alexander Y. Malcomson, a Detroit coal merchant, and was thus enabled to form the Ford

Motor Company in June, 1903, with a total cash capital of $28,000.

The Buick Motor Car Company was formed in 1903 by Benjamin Briscoe, a parts-maker, who had acquired rights to a model designed by David Buick. A year later, the Company was taken over by a Flint, Michigan, wagon enterprise. The year following, it came into control of William C. Durant, then a Flint carriage manufacturer, who, a few years later, made it the nucleus of the General Motors C ompany.

Briscoe, in the meantime, became interested in another model, designed by J. D. Maxwell, one of the dozen prominent graduates of the two Olds enterprises. The Maxwell-Briscoe Motor Company was organized in 1904, an investment first of $10,000 and then another of $100,000, was procured from the elder J. P. Morgan;[1] after a few years of successful operation, this Company, out of the ashes of which came the Maxwell and then the present Chrysler companies.

The Packard was first produced by J. W. Packard, of Warren, Ohio, manufacturer of electric cables, in 1900. Henry P. Joy, a Detroit capitalist, purchased one of the early models, and then persuaded some of his friends to join him in acquiring a controlling interest in the business and in moving it to Detroit, where it was established in 1903. The Studebaker carriage and wagon organization, after first choosing the electric vehicle, entered the gasoline field in 1908 as distributing agent for the Everitt-Metzger-Flanders Company, which it absorbed shortly after. The Overland, originally the product of an Ohio buggy manufacturer, became important after 1908, when it was taken over by John N. Willys, previously a bicycle and motor-car salesman. Four graduates of the Olds enterprises interested a Detroit merchant, J. L. Hudson, in a new design in 1908; with $10,000 of cash so acquired, together with smaller amounts otherwise collected, the Hudson Motor Car Company was organized a few months later.

The Risk of Automobile Production

Commercial bankers, from the beginning, had viewed the automobile industry with great distrust, and its rapid development soon aroused their positive hostility. Writers and lecturers in the banking fraternity cited the growing popularity of the automobile as an ominous sign of extravagance, luxury, and waste; the automobile was pictured as a siren, luring men to mortgage their homes, to liquidate their investments, to reduce their savings accounts, to divert purchasing power from all legitimate channels of consumption and investment. Depression in the bond market, recessions in various branches of trade, and other ills were laid to the motor car.

The hostile conservatism of the bankers, shared, in part, by other sections of public opinion, was accentuated by what appeared to be chaotic conditions among the automobile producers. New promotions, some of them fraudulent and most of them unsuccessful, appeared with great frequency. Each new company claimed revolutionary improvements in design, forcing older producers to make similar claims with respect to each succeeding model and causing a continuous state of unsettlement within the industry. Large numbers of automobile companies were born to but a few short months of life, and dozens were swept away in the panic of 1907.

---

[1] See Briscoe, "The Inside Story of General Motors," published in the Detroit Saturday Night of January 15, 22, 29, and February 5, 1921.

READING NO. 5

FORMATION OF GENERAL MOTORS

(excerpted from Walter Adams, The Structure of American Industry, the Macmillan Company, c1961, pp. 317-320.)

General Motors was organized by William Crapo Durant, a financial genius who had previously reorganized and revived the Buick Motor Company. Durant believed that organization and finance were the prime requisities of a healthy automobile industry. In his opinion, the high mortality rate among auto firms at this time was due to the market's rejection of any one year's model; hence, a shakily financed firm could neither survive such reversal, nor could it curvive a depression. A large firm, however, with adequate financial resources and many normally successful makers could, according to Durant, weather the storm and try again. With the objective of creating such a firm, Durant organized General Motors as a New Jersey holding company, which he hoped would eventually control all the principal auto manufacturers, in the manner of the great "trusts" of the period.

By the end of 1909, General Motors controlled more than twenty automobile and accessory companies (including Buick, Cadillac, Oldsmobile, and Oakland) and was bidding for Ford and others. Ford was willing to sell in 1908 for $3,000,000 in cash, and R. E. Olds --then with the Reo Motor Company-- also demanded cash, which Durant was unable to raise. The following year, Ford again was willing to sell (this time for $8,000,000), but the terms were still cash. The General Motors Board of Directors approved the purchase, but Durant's Wall Street backers thought the Ford enterprise was not worth so big a cash risk. Thus, once again, Ford's intransigence had a decisive effect on the industry's structure. It has been observed that Ford and James Couzens (who together owned 68.5 per cent of Ford stock) still did not fully grasp the significance of their Model T. (see: K. Sward, The Legend of Henry Ford, New York: Rinehart, 1948, p. 28). This would appear to be correct, since the net earnings after taxes in 1911 were $7,579,334 and were to reach a peak of more than $120,000,000 in 1922. It might also be observed that Durant's backers did not fully appreciate the Model T either.

The General Motors Company was successful as a producer, but under Durant's leadership it often swallowed more than it could digest. In 1910, an investment banking syndicate came to the company's rescue with a large loan, ousted Durant from the presidency, and assumed control. Thenceforth, the company's production and financial policies were conservative until Durant regained control five years later.

By 1914 the success of a low-priced car was firmly established. Noting Ford's success in reaching this market, Durant joined Louis Chevrolet, who developed the small and "low-priced" Chevrolet Baby Grand. In 1915, Durant formed the Chevrolet Motor Company of Delaware, which acquired the stock of all other Chevrolet Motor Companies (including the original Michigan firm organized in 1911). Then Jonah swallowed the whale. Durant traded Chevrolet stock for General Motors stock until he had control of a majority of the oustanding common stock of G.M. When General Motors refused to take in the Chevrolet enterprise, Durant exercised his control and again became president of G.M. It was in this venture that the duPont family of Delaware gave backing to Durant, and Pierre S. duPont later became chairman of the board. At this point, the General Motors Corporation of Delaware, a holding company, was formed which dissolved many of the subsidiaries, making them divisions of an operating company. With this reorganization there was thus created what is essentially the present organization of G.M.

In 1917 and 1918, the duPont Company invested $50,000 in General Motors, which provided some lucrative captive markets for duPont products and, years later, ample grounds for an anti-trust suit. An important condition of the investment was that the duPont Company would assume responsibility for the financial policies of G.M. and that Durant would assume responsibility for operations.

Durant was not content with the marriage of Ford's idea (the mass-produced cheap car), and his own idea (diversification and financial backing) he wanted more. While Ford was integrating his operation by moving into the production of parts and basic materials, Durant sought to match this integration by purchasing parts-producing firms. In some instances he also secured key personnel by purchasing their firms--Alfred P. Sloan came with Hyatt Roller Bearing, and Charles F. Kettering came with Delco. However, other acquisitions were markedly unsuccessful, and all of them required funds. In 1920, General Motors was caught with large inventories and short cash in declining markets for its many products. The firm was in trouble financially, and Durant personally attempted to support the price of G.M. stock on the market. The duPonts, with the aid of J. P. Morgan and Company, came to G.M.'s rescue, but Durant was forced out of the presidency and into permanent exile.

It was at this point that Pierre S. duPont became chairman, and under the duPont influence G.M. continued, although more cautiously, to "broaden" the profit base. This policy has taken three forms: (1) the gradual assumption of parts manufacture, (2) the development of foreign markets, and (3) the development and manufacture of products other than motor vehicles. It has culminated in making General Motors the world's largest corporation.

READING NO. 6

THE CREDIT REVOLUTION: THE GREAT (CASHLESS) SOCIETY

Scientists claim that the advance of the last 20 years in the physical sciences exceed those of the whole earlier span of civilization. While economists usually content themselves with less dramatic comparisons, there is no doubt that some aspects of credit are changing rapidly. Although the expansion of purchasing- power through credit has existed for thousands of years, the growth in credit has accelerated over the past 150 years, particularly with refinements introduced since the turn of the century. In the last ten years, with the widespread adoption of the credit card, consumer credit has expanded enormously. Today, we all carry money. By the time you are middle-aged, it is likely that your pockets and purses will no longer jingle; money may have been replaced almost entirely by the credit card.

One bank official was recently quoted as saying that the U.S. is already "a long step toward a cashless and checkless society." He has a point. Already some 300 banks, the national credit card organizations, the major gas companies and hundreds of retail merchants issue credit cards. A new development is credit cards that cover all the services of a particular shopping center. They make it possible to gas up the car, buy the week's groceries, eat lunch and visit the beauty or barber shop all in a single, no-cash, charge-it-all visit. Another expert believes that present trends will continue to the point where each person will have a bank account handled by a nation-wide computer system. If you work for a company, he says, your income will be automatically credited to your account. If you want to buy something in a store, you will do it with a credit card which, when inserted into a reading device, will transfer the amount from your account to the store's. If your purchasing power (that is, the funds in your account plus your credit) is not enough for the purchase, presumably the computer will refuse to complete the transaction.

The following article on growth in the credit-card business appeared in the August 22, 1966 issue of "Newsweek."

When Money's Tight, Just Put It on the Cuff

Banks have become a lot less stuffy since the days of green eyeshades and spats, but a recent scene in the credit department of Milwaukee's First Wisconsin National Bank would still lift a few eyebrows. There in the credit department perched a talking parrot, screeching obscenities at the working clerks.

The parrot, appropriately nicknamed Debit, was an uneasy souvenir of First Wisconsin's recent plunge into the hottest fray in bank merchandising--the credit card. The young woman who had bought Debit on a credit card couldn't keep it, because her parents wouldn't have the bird in the house; the pet store wouldn't take it back, and the bank had already paid for it. "It had such a foul mouth that we had to isolate it," one bank executive winced.

Ultimately, the young woman moved into her own apartment and reclaimed Debit. And despite the temporary embarrassment, First Wisconsin has no intention of abandoning its credit card. "It would be like trying to stop a snowball halfway downhill," says Reynold Rusch, the bank's marketing vice-president.

Snowballing: The credit-card snowball is cutting a widening track through the banking world. Some 300 U.S. banks offer credit cards of their own. Some, like Bank of America, have begun franchising their cards for use by other banks. Some are offering ingenious plans combining the features of credit cards with traveler's checks and limited overdrafts. And the major credit-card companies, scenting a huge new market, are moving into the field with franchise arrangements offered to local banks. The resulting competition is so intense that bankers are behaving like circus press agents--even in Botson, where the State Street Bank & Trust Co. is offering the BankAmericard in competition with First National's Bancardchek plan. "We are marshalling an enormous sales force to call on every retail outlet in the area," says one of the rivals. "We plan on making 14,000 calls in the next 90 days. We have some pretty young girls dressed up like airline hostesses with magnetic smiles--we want to add a little sex appeal to the thing, you know."

Bankers haven't always been this fond of the credit card. In fact, the card became a way of life years before it made money for anyone; in the five years after credit cards proliferated in 1958, one expert estimates, their sponsors suffered losses of more than $100 million. Gradually, though, the companies learned to sift out credit risks and program computers to spot irregularities, just as important rising volume improved profit margins. "Once you have made your nut, so to speak," says Kenneth V. Larkin, vice-president of Bank of America, "a small arithmetical increase in volume can cause a large geometrical increase in profits."

In the longer view, the credit card makes eminent sense as a way to expand a bank's business. Frank Schumway, general manager of Michigan National Bank's Bankard, estimates that half of the 100,000 people who have signed up for the statewide system since March were not originally customers of its ten member banks. "Of course," he adds with a smile, "they are now."

No Argument: Credit cards also help to cut down the mounting flood of checks and paper that threatens to swamp modern banking. But apart from all the advantages, sheer competition forces some banks to enter the field. As one reluctant California banker put it: "Who can argue with success? We may have to join - we'd be the only bank in the state not offering cards."

Banks' customers, in turn, get the benefits of any credit card plus a few more. With a line of credit available any time he needs it, a cardholder can get an installment loan without any fuss at all. Often, it's as easy as checking a box on a form that comes with his normal credit-card statement. Moreover, he need no longer worry about overdrawing his checking account; any such overdraft can be counted as a loan until he settles it up. (Some people, of course, find this an irresistible temptation. One Atlanta cardholder strode into Citizens and Southern last week demanding his credit be cut off, since he couldn't trust himself).

As for the retailers, restaurants and other businesses that participate, they pay fees under most plans ranging from 3 to 5 per cent charged the airlines to 7 to 8 per cent for smaller retail shops. But the good credit-card plans attract new customers (one restaurant owner, for instance, credits his credit-card trade with a 15 per cent increase in business) and cut down worries over unpaid bills (a Wisconsin hardware-store owner adds that he is saving $3,000 to $4,000 a month on what it used to cost him to carry his accounts).

The new plans competing for this booming trade are both varied and ingenious. Among them:

- Bankcardcheck, a combination credit card and traveler's check. Bankcardchek was introduced only last June by First National Bank of Boston, and some 90 banks have signed up to sell it. The bank's subscribers get an identification card and checks worth up to $500, on which they can write the precise amount of purchases. Unlike most credit-card systems, a Bankcardchek is as good as a cashier's check, and the retailer isn't charged anything for the service. The user pays an annual fee of $5 to $7 and a small charge for each check used; if he doesn't have enough cash in his account, he gets a prompt loan from his bank. Bankcardchek gets a flat franchise fee.
- American Express, which announced that it would offer its card to banks as part of a package deal in which banks would also offer cardholders a line of credit of $2,000 or more any time they need it. The banks will get $10 of the $12 membership fee for each new cardholder they bring in. They also stand to increase their loan business, since once the cardholder uses his line of credit it becomes a bank loan for that amount (subject to the bank's usual interest charge). American Express, for its part, takes full responsibility for any unpaid debts.
- Diner's Club, with another franchising plan that will also go into operation soon. As in the American Express plan, the local bank's name will be printed on the credit card, and it will get $9 for each new cardholder. But the Diners plan also gives the bank 3/4 of 1 per cent to 1-1/4 per cent of card volume, plus $4 of each year's annual renewal fee. In return, the bank must take responsibility for accounts unpaid for 45 days or more.
- Carte Blanche, with a plan called "Banker's Club" that operates like Diner's - with a line of credit and a feedback to the bank of 3/4 per cent of volume.

While the clubs are launching their new programs with elaborate brochures and teams of salesmen calling on banks across the land, banks are stepping up their own credit-card activity. Bank of America last month announced that it was going national with its highly successful BankAmericard (nearly 1.8 million members, $185.9 million billings). Ten banks in other cities have already signed up and are preparing to launch promotional drives for BankAmericard in their areas. Bank of America competitors in California, meanwhile - and another group of big banks in Chicago - are meeting regularly to work out universal cards of their own. And New York's Chase Manhattan, after selling off its money-losing retail credit-card operation in the early 1960's, is also studying a cooperative deal.

Once in business, though, banks must still be wary. Life-on-the-cuff isn't as beautiful as it looks. For one thing, there are the usual technical problems of dealing with a computer. A Phoenix executive was puzzled not long ago when he received two letters from the Valley National Bank - one accepting him for the bank's credit-card service, the other turning him down flat as a bad credit risk. (The second letter was a goof and he was allowed to use his charge card). And a Pasadena woman was incensed when a local Bank of America branch issued her a credit card with a $1,000 line of credit. She stalked into the branch, threw her card on the manager's desk and threatened to withdraw her account "if that's all I'm worth to you." Since she was worth more than $25 million, she got all she wanted: a $200,000 limit.

As in any credit business, the gravest risks involve bad debts and outright fraud. Even careful checking can misfire at times. A Honda dealer in Michigan recently called a local bank to see if he could sell a customer a $250 motorcycle on his credit card. The bank approved, but the customer later turned the Honda in on a Cadillac and vanished into the woods of northern Michigan. Police are still trying to track him down.

Refinements: To curb abuses, the credit-card companies have hired detective forces and have pressed computers into service. Diners Club vice-president Matty Simmons explains that "in the last year we've refined the system to the point that the machines single out heavy users or cardholders who may be getting in over their heads." As a result, bad debts for the credit-card industry as a whole now amount to only about 1 per cent--half what they were in the early days.

In many ways, bankers view the credit-card boom as a giant step toward the so-called cashless society - a blue-sky idea which appears more possible all the time. The dreamers see, for instance, a time when a company computer sends a payroll tape to a bank computer, eliminating paychecks, then all purchases would be made on a universal credit card. The bank then would simply move figures from one account to another, eliminating a cash or check payment.

The cashless society remains a long way off, and some customers at least are just as happy. "It's getting to the point," grumbled a depositor at Dallas Preston State Bank, "that they handle every damn thing except banking." But the proliferation of services, like the credit-card boom itself, is what's happening. As a California banker summed it up: "This seems to be what the public wants. We've got to be competitive."

LESSON 4 READINGS

Reading No. 1

THE KIOWA, A PLAINS INDIAN TRIBE

I. Geography and Resources

Buffalo was the principal resource for the Indian tribes who lived on the Great Plains, a sea of grass that could support immense herds. But reliance on the buffalo--its meat as the staple food, its hide for clothing and shelter (tipis) came only after the introduction of the horse to the New World. The horses of the Plains Indians were descendents of those brought by the Spanish when they first settled the southwest at the beginning of the seventeenth century. Yet, in little more than a hundred years, horses had become part of the landscape of the vast plains. Whether the Indians acquired horses by trading, by raiding, or by capturing some of the herds that ran wild, their coming transformed tribes who had been nomads, moving about on foot (with only dogs to pull and carry), to highly mobile people mounted on horses.

The horse revolutionized the economy and social organization of the Plains Indians. Horses enabled the Indians to transport longer tipi poles and more tipi covers (they could make larger tipis and keep them warmer), to secure many more buffalo by hunting and to accumulate greater food supplies because they could carry sizable surpluses from camp to camp. Of the dozens of tribes who moved into the Great Plains, the Kiowa became one of the richest. Like the others, they enjoyed the greater ease and increased efficiency the horse brought. But the Kiowa were almost unique in the way they also used horses as a means of creating and amassing wealth.

About 1830, before the white man threatened their way of life, the Kiowa occupied a large, strategically-situated territory, and had formed an alliance with their Comanche neighbors with whom they often went on raiding parties. Their range was well watered, rich in grasslands, and the weather was not too severe--open winters were the rule--altogether ideal horse country. It was also choice hunting land; the road of migrating buffalo cut directly through the heart of their country. Best of all, it was close to the source of wealth; they were within fairly easy striking distance of Mexican trading centers and colonial settlements.

II. Social Organization

The tribe, numbering some 2000 members, was divided into some twelve to fifteen bands. The band was the fundamental social group. Its nucleus was an extended family to which were attached a few families of friends and hangers-on. Its composition was fluid: newly-married couples tended to divide their time between the husband's band and the wife's, and individual families could change their band affiliation at will.

The band operated as self-contained units, economically, socially, politically, and, except for the annual tribal midsummer Sun Dance, even religiously. Though each man secured his own "medicine" (supernatural power and protection), a band tried to attract one of the tribe's ten medicine men (priests), each of whom ministered to one of the ten highly-venerated medicine bundles. Each bundle was served by its own medicine man, whose office was inherited. The functions of these tribal medicine men were to settle disputes--they were the bearers of the peace pipes--and to supervise the frequent sacrifices, vows and petitions made before the medicine bundles. In the dangerous life they lead, Kiowa men had much to ask of the sacred bundles, most often for success in war so that they could qualify for a higher rank.

Kiowa society had four ranks, or grades. To reach the highest rank, a warrior had to satisfy five requirements: (1) As they said, "He should look handsome on a horse" (obviously they allowed for a noble animal to compensate for its rider's looks), (2) he should have enough property to give some away, (3) he should be generous, (4) he should carry himself like an aristocrat and be courteous in manner, (5) he should have a distinguished war record. The last requirement outweighted the other four.

The headman of the band was the chief man of the band's strongest family; his authority came from his own achievements and not from the position he held. His ambition to strengthen his own personal position and, by attracting families to his band to increase the size of his band, could be realized by generosity.

Generosity, as the Kiowa used the word, gave a special meaning to the possession of property--it was the socially approved use of wealth. A man was considered generous to the degree that he gave property away, not in his own name, but in the name of a man, or woman, or child whom he wanted to honor. Whether horses, food, fine hides, beautifully-worked garments--a gift publically given made the giver "generous" and in no way obligated the person who received it. If a headman wanted to help a young, ambitious relative earn his way to a higher rank, he would lend him a horse to join a raiding or revenge party, but if he wanted to establish his own generosity, he would give valuable goods away in the young man's name to publicize the latter's brave deeds. By the quality and frequency of his giveaways, a wealthy man also became a generous man.

The second-highest grade was made up of men with wealth--generous men of noble personalities, men who had every requirement except the necessary war deeds. In this grade were most of the medicine men, the able hunters, the artists, the skilled herders of horses and other non-military specialists. The third grade included those who were poor, honest and eager to better themselves. These men attached themselves to wealthy relatives or to a band whose chief was outstanding, and in exchange for horses lent them for hunting and transportation (sometimes to join a raiding party), they would give their services to their benefactors. The lowest grade was made up of men poor in spirit and possessions, shiftless, lazy, unreliable; they would even steal from their own kin. To the headsman such neer-do-wells were a nuisance, but he did not have the authority to expel them from his band.

Loss of rank was as clearly and formally established as was its attainment. Lying, deliberate stealing and, especially, cowardice degraded a man's rank.

III. Wealth and Rank

Warfare was of two kinds: the horse-raiding expedition and the revenge party. The revenge party, primarily a matter of honor and courage (not wealth), could number as many as 200 warriors drawn from the whole tribe. It was a quick affair, quickly over so that it would not interfere with the serious work of hunting. The horse-raiding expedition, on the other hand, was a small group, anywhere from two to twenty men belonging to the same band. Since its aim was to secure horses, it could last as long as it took to ride keep into Texas or Mexico, the favorite raiding places.

Whether for revenge or booty, the man who organized the enterprise was the leader, and its success or failure reflected on him. If the party failed, he would have a hard time recruiting followers for his next venture; if successful, his following for his next project would be greater. The leader, the war chief, was the man who initiated the enterprise; he commanded every aspect of his party's activities: he chose the campsites, appointed the men to stand watch (he himself took the night watch), to act as scouts, to find springs and tend hourses; he performed the religious duties with his own "medicine" on which the lives as well as the fortunes of the party depended. For the duration, from the time the party left the encampment until their return, the leader's authority was absolute; he was seldom disobeyed. Finally, he distributed the stolen horses among his followers. The raiding party was the road to riches.

Horses, for so the Kiowa counted wealth, were unevenly divided among the individuals. Quite a few families owned none at all; many had from six to ten. A number of families with 20 to 50 animals were considered well-to-do, while a few very rich men counted hundreds of heads in their herds. The average family of five adults, with a well-balanced herd of ideal size, would have ten pack animals, five riding horses and two to five buffalo ponies. Even a millionaire with a herd of 100 horses would have only about 20 broken horses. The remainder, unbroken, were more than a sign that he was a successful warrior of high rank: unbroken horses opened a new source of income to him--with these he could engage in trade.

Horses, trading, raiding: those who owned surpluses were the most active traders and, in turn, were compelled to be the most active raiders in order to replenish their surpluses. Not only did the Kiowa consider horses as wealth, horses were necessary for exchange. When trading with Mexicans for flour, weapons and ornaments, unbroken horses were used exclusively. In exchange with other Indian tribes, it was by giving outstanding value in horses that the Kiowa earned their reputation for generosity. Even exchanges within the tribe were most commonly made in the form of horses, and the services of all specialists were paid for in the same medium.

IV. The Economic Cycle

From the late summer into December the Kiowa were busy preparing for the lean winter months. During this 'Indian Summer' the self-contained bands followed the large buffalo herds. These were months of continuous buffalo hunting when all the hunters of the band held themselves in readiness to take quick advantage of the presence of the herd. The hunt itself was loosely organized: the band approached a buffalo herd fan-wise and without any leader to give a signal, at a given moment each man pursued the buffalo he had singled out to make his kill. In the camp, the women worked as hard as the men to preserve the meat and tan the hides brought in. Winter was spent in fairly stationary camps situated in a sheltered place by a stream with woods nearby. It was a time for taking it easy after the strenuous months of hunting, a time for visiting, a time when women sewed and decorated the skin clothes and mocassins and men might do a little hunting to vary the diet with fresh meat. By spring, the food supplies were low; these were months when game was scarce and the quality of the buffalo was poor. The Kiowa endured it, waiting for the midsummer season.

Midsummer was the best time for hunting and the best time for raiding. The two midsummer months were also the happiest time of the year when the whole tribe gathered for the Sun Dance. This was the great, exciting social and ceremonial occasion when tribal unity was achieved. For instance, buffalo hunting done by the tribe, unlike that done by the bands, was highly organized and supervised by members of the policing societies who could discipline anyone who disobeyed them. It was they who gave the signal for all the hunters to start at the same time so that no selfish or too eager hunter would frighten the herd before all were ready. Once the signal was given authority ceased and each hunter was free to chase whatever animal he had chosen.

Bernard Mishkin. "Rank and Warfare Among the Plains Indians." Dissertation for Ph. D., Columbia University, New York City, 1940.

LESSON 4 READINGS

Reading No. 2

THE TSIMSHIAN OF THE NORTHWEST COAST

I. Geography of the Region

The Northwest Coast extends almost 2000 miles, from Yakutut Bay in southeastern Alaska to Trinidad Bay in northern California. The area is shielded from the cold of the interior by steep mountain ranges that rise almost vertically from the sea; the shore is deeply indented and strewn with a profusion of off-shore islands. A dense forest covers the land from the sea to mountaintop. Cliff and forest severely limit the number of open, level sites suitable for villages.

The Indian nations of the Northwest Coast who inhabited this area when Europeans arrived around 1800 created an elaborate culture with a well-developed technology and a high degree of specialization for exploiting the natural resources. Their brilliant art, flambouyant and intricate, touched the commenest article of everyday use but reached its finest expression in the goods used in ceremonies related to inheritance, wealth and status.

Among the outstanding nations of the Northwest Coast were those who spoke the Tsimshian language. Because territorial property rights were specified for each tribe and nation, the vast area they occupied was defined with the precision used today for valuable real-estate holdings. Anthropologists have grouped these Indians into three divisions according to which of the three Tsimshian dialects they spoke. This essay describes the Coast Tsimshian, made up of fourteen tribes, each of which owned and occupied its own village.

The Coast Tsimshian were an opulent people. Theirs was a land of plenty. Its waters, both salt and sweet, abounded in food. Then, salmon was king, joining ocean to inland waters by its extraordinary life cycle: yearly, millions of salmon would leave the ocean where for two, three or four years they had lived and grown to great size and maturity; they would gather at the mouths of the rivers where salt and fresh water mix and then swarm, fin to fin, nose to tail, up rivers and streams undeterred by swift currents, rapids and waterfalls to make their way to the very waters where they had been spawned and where, the cycle completed, they themselves would spawn and die. Before the spectacular salmon run, immense schools of the small herring and smelt would seek out the kelp-strewn beaches to scatter their eggs; vast numbers of the famous olachen (called "candlefish" because it is so rich in oil that a wick threaded through a dried fish burns like a candle) crowded the rivers. The sea provided an easy bounty of clams, mussels, small abalone, oysters, crabs and delicacies--"when the tide goes out, the table is set," it was said. The ocean was also rich in halibut and cod, and, inviting the hunter, were the huge sea mammals, the hair seal, sea lion, sea otter, porpoise, and even the mighty whale.

As if to match the sea's bounty, the land teemed with game. Deer and elk lived in the woods; the mountain goat, whose hair was spun and woven into blankets by the Chilkat, a people far to the north, made their homes in the rocky crags above the tree-line. By streams and berry patches the bears, the black, the grizzly, and the huge, dangerous brown, competed with man for fish and fruit. Skins of beaver, mink, land otter and pine marten were valued as decoration for chiefly headdresses. The rich bird life supplied feathers and down which had status and ceremonial uses. From the sea came their food (except for berries, their only vegetal food), but from the land, rich in fir, spruce, red and yellow cedar, they took the materials for shelter, clothing, transportation and most of their high art.

II. Lineage, Status and Wealth

Each Coast Tsimshian tribe occupied a separate village (their winter quarters) and within the village the people were divided into clan groups. Each clan group owned and lived together in a large well-built house made of massive red cedar timbers; the usual house measured fifty by fifty-five feet. The inhabitants would average, it has been estimated, from thirty to forty persons.

The membership in the local clan group was strictly determined by lineage; all the men could trace their descent directly from the same ancestor. And in the case of the Coast Tsimshian clans, the ancestor was a woman, for the clans were matrilineal. A person counted descent through his mother, the reverse of our patrilineal system where our surname--Jones, Smith, Hefner, etc--is our father's last name. This meant that in Tsimshian society, the children belonged to their mother's lineage.

Notwithstanding the matrilineal descent, it was nevertheless a man's world: the organization of the local clan group was centered around the men. It was the men who held the ranks and honors in the clan group, and they manipulated the lineage's wealth. The household membership was organized around a nucleus of men, all the men of the lineage related to each other through their mothers. In addition to the men, the household might include a few elderly, widowed women of the lineage. The remaining members of the household were nonlineage members--the men's wives who came from other lineages, the men's young, unmarried daughters, the men's young sons under nine or ten, and finally, perhaps, a few slaves--war captives who probably eventually would be ransomed and returned to their own clan group.

The boys, when they reached puberty, were sent to their own lineage household (their mother's) to be raised, and when the daughters married they went to live in their husband's lineage household. Thus, women went from their father's lineage household to their husband's house and did not live with their own lineage (their mother's) unless they were widowed.

Lineage not only determined a person's citizenship in a local clan group, it also determined one's personal status and one's wealth. Each member held a social position associated with certain rights with the group, and even the lowest-ranking commoner was entitled to names that belonged to the group and participated in the group's ceremonial affairs. On this sliding scale, the chief's position was apparent as was that of the lowest commoner. Within the lineage, every person's position was clearly stated by his inherited rank--chief, noble or commoner. The chief of the lineage was the oldest member who was descended in the most direct line from the lineage ancestor--the eldest son of the eldest daughter of the eldest daughter, and so on back. The formal rank of all other lineage members was reckoned on the same basis: that is, the lowest commoner was the person who was the most distant relative still counted as kin by the lineage.

A man's rank was shown by the location of his quarters inside the lineage house. Within the house, the main living space was a central pit, about five feet deep and some thirty feet square, reached by steps. The outside wall was rimmed by cubicles used for storage space and as sleeping quarters. At the rear, the chief, his wife, or wives, and their small children occupied one or more cubicles. His quarters had fine panelling and were elaborately painted and carved with designs depicting the family crests. People of lesser rank had family spaces along the side walls. But high or low, all lounged and ate in the central living space--the pit that surrounded the central fireplace where the women cooked.

In its actual operation, the rank-and-status system was not utterly rigid and inflexible. It could be modified by an individual's talent or enterprise. Thus, a man of quite low rank who was a skillful canoe-maker or mask-carver, or bold warrior could become so valuable to his lineage and so esteemed by his chief that he might be given certain prerogatives greater than those he was entitled by birth. He might be privileged to own a higher ranking name, to have the title of "war-chief," given for his war exploits, to use a special crest, or to have the exclusive rights to a good fishing spot. And just as a man could better himself, so could he fall into disfavor and receive only the barest minimum as his share of the lineage's honors and economic benefits.

It was the lineage (all the members, not any single member) that owned the lineage house, the strategically-located fishing stations, hunting areas and berry grounds. In addition to such valuable tangible properties, the lineage owned intangible ones--heraldic crests, prized personal names, ceremonial prerogatives and songs and dances for ceremonies. These were highly esteemed for thier social and religious worth. The lineage also owned its own origin myth, the official family description of its supernatural beginning; thus, each lineage, it could be said, had its own verson of creation. Whatever rights an individual had inherited or had been given were rights to use, not rights of ownership: he could not sell such rights and, indeed, his production (olachen, salmon, etc.) belonged to the lineage. The chief, himself, was the custodian rather than the owner of the lineage wealth; he used and manipulated the wealth to enhance the prestige of the lineage, a prestige in which all the members shared.

III. The Economic Cycle

The winter houses were the principal homes and symbols of the lineage's wealth. It required much time and labor to prepare the timbers and planking that went into their building and to carve and paint the finished houses to make them splendid and impressive, time and labor that often had to be paid for by feeding the skilled workers during the period they were employed in building and decorating the house. The food surpluses used for this as well as for the round of winter feasts and festivities given by the lineage were produced by the household.

How and with what were their houses stocked? Every spring, the chief moved the household to sites the lineage owned along the lower Nass River where the heaviest annual run of the olachen (candlefish) took place. The oil fish were caught in great quantities; the schools of fish were so thick it took but a short time to fill a canoe from a special, efficient tubular net. Canoe-loads of fish were dumped into pits where they "ripened;" they were then scooped into water-tight, wooden boxes, water was added and the smelly mass boiled. The oil was skimmed off and allowed to cook and harden into grease.

Olachen grease was one of the great riches of the Coast Tsimshian; it was valued far and wide as food. To obtain it, the Haida, a neighboring nation whose property had no olachen run, brought large (six feet wide and, sometimes, forty-feet long), sea-going canoes made of the finest red cedar, elaborately carved wooden boxes and quantities of flaky, dried halibut which they exchanged for olachen grease. Another neighbor, with whom the Coast Tsimshian fought as well as traded, brought a variety of trade goods, including the enormously expensive copper plaques which they had obtained from the distant Copper River Indians. Or when the Tsimshian went inland to trade for furs, dressed deer and moose skins and treasured articles embroidered with porcupine quill (which, in turn, had come from tribes far in the interior), they paid in olachen grease. The olachen camps on the Nass was one of the peaks in activity and excitement.

There was a brief interval spent in halibut fishing and hunting the sea mammals before it was time to go the the fishing stations on the Skeena to get weirs and traps ready for the salmon runs. Salmon fishing was hard work, drudgery; it was not the skillful or lucky man who put up the big catch, it was the industrious one. Men and boys tended traps, or harpooned, or dip-netted the fish and then carried them back to the camp where the women cleaned and dressed them, and, with blades of sharpened mussel-shell, sliced them thin. The slices were hung on wooden skewers to dry. There was wood to get--spruce and fir to keep the fires burning, and half-rotten alder to make the smoke that flavored the fish. Salmon fishing allowed no time for rest for either men or women. Only after the salmon season could the Indians enjoy berry picking. When the supply of dried salmon was safely in the big winter house and the berries stored for future use, there was still the work of repairing canoes and houses in preparation for the winter.

IV. The Ceremonial Life

The abundance of food and goods made the winter feasts and festivities spectacular. These were not individual affairs, capriciously given; they were part of the social and ceremonial life. The word for festive occasions was potlatch, which simply means "giving." A potlatch was a ceremonial given by a chief and his lineage to another chief or chiefs and their respective lineages, at which the guests were first feasted and then given wealth goods. A potlatch was more than a formal, host-guest relationship. It was with such ceremonial giving that rights and properties, tangible and intangible, were transmitted. The guests witnessed that a privilege was rightfully given to its new bearer.

The higher the rank of the person involved, the more elaborate and splendid the ceremony. Commoners either had modest potlatches or, grouped together, had a lesser place in one of the large, sumptuous, chiefly potlatches. Potlatches celebrated such events as the first naming of recently-born infants, the ear-piercing of both boys and girls, the lip-piercing of small girls for thier first small labret (a plug of wood, stone or ivory in the lip), a girl's coming of age, marriage, and especially the death of a member of the lineage and the transmission of the dead persons' properties to his or her heir.

The death of a chief set a complex chain of events in motion. Caring for, preparing the body, the cremation and all physical duties connected with death were handled by the chief's father's lineage (those whose house he had left as a youngster when he went to live with his mother's lineage). Preparations for so important a potlatch might last a year or more, for they could not interfere with the normal cycle of work. The ceremonial gear had to be repaired or renewed, songs and dances learned and rehearsed, valuable furs secured by hunters, loads of olachen grease carried to other tribes to buy prized articles. Invitations to the potlatch were presented in person in ceremonial finery and song. The house had to be repaired and often was rebuilt. To prepare a memorial pole or to build the new house, the heir might enlist the help of other groups, and they were feasted nightly by the mourning group.

At the potlatch, the invited guests, wearing their ceremonial garments and grouped according to rank, made their entrances and were formally received. Beginning with modest events, the celebration mounted until the peak was reached--the heir's assumption of his chiefly properties. This climax was heralded by a masked dancer, representing the ancestral spirit, carrying a Copper--the large copper plaque which had been paid for by vast amounts of olachen grease. The dancer instructed the heir to destory the Copper by breaking it into pieces, the pieces to be presented to the guest chiefs. Gifts were distributed to all guests. Each was a gift, but it was also in the nature of a payment to the recipient for having witnessed the transfer of a particular right or privilege. The richness of the gift was carefully planned to reflect both the prestige of the giver and the rank of the recipient.

When the guests had gone and the new heir had assumed his rank and privileges, he had to feel that he had discharged his obligations to his predecessor and the family to everyone's satisfaction, that he had shown off the wealth and power of his family by the splendor of his potlatch. The chief's feelings and satisfactions were those of his lineage who had contributed to his success and shared in his satisfaction.

Reading No. 3

INDUSTRIAL PRODUCTION IN THE SOVIET UNION

Just as in the United States, industrial production in the Soviet Union is carried out by individual firms. A Russian plant which manufactures railroad cars looks very much like its American counterpart. The office staff is probably smaller and the production staff larger, but there is little difference in the machinery used and in the organization of production.

This difference in size of office staff might seem unimportant, but it is an indication of fundamental differences between a Soviet and an American firm. American firms are in business to make a profit for the owners. Managements try to keep cost of production as low as possible and to learn enough about market demand so as to produce a commodity people want at a price they are willing to pay. The need to win customers and hold them means that much of the clerical staff of an American firm is devoted to determining and administering the market decisions of management.

On the other hand, the managers of Soviet production establishments do not respond to prospects for making profits but rather to fulfilling a plan. The Soviet economy is organized according to a plan designed by the central government in which every plant has a place.

The Soviets begin with a single overall long-term "five year plan," a statement of general goals designed by the political leaders of the country, the Communist Party. Instituted in 1928, there have been seven of these general plans outlining the hopes and aspirations for economic growth in the next five years and prescribing the specific direction of that growth on the basis of these politically determined long-term plans. The government planning technicians and individual plant managers design the annual plan, an enormous budget allocating expected available inputs to specific outputs.

Preparing the Soviet Plan

Taking the basic production objectives set by the political leaders, the national planners and technicians employed by the U.S.S.R. Economic Council first determine the "leading links," the high-priority production targets. Then they forecast the total supply of basic raw materials which will be available and allot these resources (inputs) to specific uses (outputs); allocation goes first to the "leading links" and then on down the line to succeeding lower priority outputs. All allocations are made in physical units (1,000,000 workers; 20 billion tons of pig-iron) rather than in money terms. If unpredicted shortages occur, the resource allocations from the industry with the lowest priority are shifted gradually towards the leading links.

Meanwhile, plans have also started from the bottom. Each enterprise sets down what it hopes to produce the following year and what it needs to meet that goal. The enterprise plan is sent to the Regional Council which receives all the plans from individual enterprises in its region. All plans are then combined and sent up to the Republic Economic Council. The plans of the fifteen republics (the U.S.S.R. is a federal union of fifteen republics) are then combined and sent up to the U.S.S.R. Economic Council, the top-level planning group. There, a material balance must be achieved between what is estimated as the supply of factors (available inputs) and the demand for products (desired outputs). This balance is crucial. It must be very difficult to achieve with its hundreds of thousands of parts involving thousands of individual enterprises. Any single revision may require hundreds of other changes. For example, if steel capacity is to increase, more coal is needed, but in order to ship more coal, more railroads need to be built, but that requires more steel capacity, and on and on.

The U.S.S.R. Economic Council completes the plan so that the supply of and demand for inputs is balanced. The final plan is sent back to the Republic Councils where broad allocations of goods are made to the regions. The Regional Councils allocate resources and set specific output goals for each production enterprise.

Managers' Problems in Fulfilling the Plan

Thus, each enterprise has a production quota, and each is allocated a set amount of the factors of production--labor, raw materials and investment capital--with which to meet its quota. In addition, the plan often specifies the sources of raw materials and capital goods as well as those enterprises which are to receive the firm's output. Finally, the plan sets prices of both inputs and outputs. Labor is the one factor which the firm must purchase in the market. Wages are set by the State, but workers are free to move where they wish. Consequently, firms must compete for labor; they do so by creating favorable working conditions by offering workers and their families extra social services and by hiring or promoting workers to higher job (and therefore wage) categories. There is a limit to how free a manager can be however: if he pushes up labor costs too high, he cannot meet his assigned quota with the budget available to him.

Whereas in America the major problem for business managers is keeping sales up, in Russia it is procurement--maintaining an adequate supply of factors of production to meet their quotas. In Russia, the ever-expanding economy insures a market for goods, but prices of inputs are fixed in the plan, and the incentive system of over-fulfillment of the quota encourages every enterprise to try its hardest to get access to and sometimes hoard short supplies.

The special institution of the "pusher" has arisen to find supplies and to act as a liason agent between the raw material supplier and the plant manager. The manager can use some of his funds to pay this agent by cutting back on other costs of inputs. These expediters are highly specialized and have intimate knowledge of the industries of which they are a part; but they are outside the formal structure of the law, the economy, and the administration; they are, in effect, not in the plan.

The Effectiveness of the Plan

In Russia, the criterion for good management is the ability of a manager to over-fulfill his quota each year when the quota to be over-fulfilled is raised year to year. Given the fact that quotas are stated as quantities rather than as quality specifications, this incentive system can create two serious allocation problems.

Because quotas are set in terms of total absolute physical quantity and total market value (value in Russia is also absolute, or fixed, because prices are set by the State) rather than in terms of quality specifications, managers do not have to respond to customer preferences. A nail manufacturing firm might find itself behind on its weight quota, and the manager will switch to the production of heavier nails even though customers have ordered small ones. The Soviet humor magazine "Krokadil," described this managerial solution in a cartoon showing workers in a nail factory celebrating the over-fulfillment of their quota around a five-ton nail.

To promote a growth in efficiency, the planners raise a plant's quota each year, and the new quota represents an increase over the plant's actual output of the previous year. The successful manager usually over-fulfills his quota, but not by very much, and he may follow a deliberate long-run policy of operating the plant at less than one hundred per cent capacity, thereby hoarding scarce inputs. He has his reasons. If he goes overboard in over-fulfilling this year's quota, next year's will be raised accordingly. Then, if next year he should have trouble with the equipment, or problems getting materials or labor, he might not be able to fulfill his quota. For such reasons he may decide to run his plant safely below full capacity. This is the way his annual output statistics will show an over-fulfillment of his quota and a steady growth in production from year to year, but he nevertheless has extra capacity he can use to meet the quota should there by any unforseen procurement problems.

Whatever the problems of plan fulfillment, the Soviet economy has grown rapidly (in 1964, the growth-rate in Russia was twice that of the United States) and the Russian people are enjoying an increasingly higher standard of living.

The rigidities of the Soviet-planned economy noted above may eventually be offset by two major industrial developments and by changes in the incentive system of over-fulfillment. The refinements of computer techniques will allow more accurate calculations of the output and input requirements necessary to achieve the plan. Introduction of automated plants will enable managers to program production runs so that both "quality" and "quantity" of production can be specified with greater accuracy in the plan. But also, there is evidence that the Communist countries are making more use of monetary incentives. In the last few years there have been experiments in Russia and in the East-European Communist countries with market-type incentive systems for some enterprises. It seems clear that Russian leaders are willing to explore forms of economic reform which represent a profound change in the values of society.

Reading No.4

THE BOSTON ICE TRADE

In 1805, the United States was new and needy. Today we would consider (at least compared to the British economy) the 1805 U.S. economy a developing country. Scarce money limited business opportunities. It was a time which called for men to use their ingenuity and wits, their ambitions and guts. This is the story of Frederic Tudor. He was twenty-two when he proposed to ship ice from his father's pond in Saugus, Massachusetts, to the West Indies.

> (the following is excerpted from, The Maritime History of Massachusetts, Samuel Eliot Morison, Houghton Mifflin Co., Boston and New York, 1921, pp. 280-285.)

Boston thought him mad, and seafaring men, fearing such a cargo would melt and swamp a vessel, were persuaded with great difficulty to handle his brig. His first venture was one-hundred and thirty tons of ice to Martinique in 1805. On receiving news of its complete failure, he wrote in his journal, "He who gives back at the first repulse never will be a hero in love, war or business." By 1812 he had built up a small trade with the West Indies. The war wiped him out. After the Peace of Ghent he obtained government permission to build ice-houses in Kingston and Havana, with a monopoly of the traffic. It began to pay, and between 1817 and 1820 he extended the business to Charleston, Savannah and New Orleans, the ports made rich by the new cotton plantations.

Frederic Tudor's journals reveal something of the pains, ingenuity and persistence required to build up the ice-exporting business. Vessels had to be double-sheathed, to protect the ice from melting, and the captains had to be cautioned, with wearisome repitition, never to let the hatches be removed. Tudor experimented with all sorts of filling; with rice and wheat chaff, hay, tan-bark, and even coal-dust, before he settled upon pine sawdust as the best insulator.

The remarkable thing about Tudor's ice trade is that instead of filling a long-felt want, he had to create a market at every new port; and to make the market pay, he had to educate not only the well-to-do, but the working people. He had to teach his employees how to promote an ice-cream establishment, instruct people in the art of preserving ice at their homes, construct a temporary ice-house on shore, and introduce it into the hospitals. Tudor's parting comment to the captain of the barque Madagascar, which took his first shipment to Rio de Janeiro, "...you can make a commencement for introducing the habit of cold drinks at the same price as warm (that is, do not charge for the ice) at the ordinary drinkwell...The shop frequented by the lowest people is the one to be chosen for this purpose."

Nor did his pioneer work end with creating a market. No one in Southern ports knew how to store ice during hot weather. Mr. Tudor had to provide the materials for ice-houses, employees to construct them, and agents to take charge of distribution. Their carelessness and dishonesty was a constant trial. He became an expert in what nowadays is called the science of salesmanship. Playing on local excitement and curiosity, a high price was charged on first shipments. Gradually the price was lowered; and in order to stimulate steady sales, tickets were sold at a reduced price, entitling the bearer to so many pounds on presentation at the ice-house. At Charleston, South Carolina, in 1834, Tudor sold ice for 1¼ cents per pound, but ice tickets were sold at the rate of 1-1/8 cents. Previously he had cut the rate to 3/4 of a cent per pound in order literally to freeze out the Thayers of Boston, who endeavored to compete with him. At New Orleans he was selling at 2 cents a pound; at Havana for 3 cents a pound.

In May, 1833, Tudor made his first venture to Calcutta; one hundred and eighty tons of ice in the ship Tuscany. Almost two-thirds of her chilly cargo was landed in good order. Many are the yarns told of its reception. A wealthy Indian merchant asked the captain, "How does this ice grow in your country? On a tree? On a shrub? Indignant natives demanded their money back, after leaving their purchase in the sun. The poverty of the people made it difficult to establish a wide market; but the Anglo-Indian community quickly took to iced drinks, and paid large sums for the Baldwin apples, which were buried in the chilly cargoes. The trade was as genial for ship-masters as it was profitable for Mr. Tudor. While supercargoes (the supercargoes was the business agent for the shipping firm; the man in charge of the business transactions), dickered for return freight...the Boston captains moored their vessels to the banks of the Hoogly, and played host with drinks mixed Yankee fashion, to all ships' officers in the port of Calcutta.

Between 1836 and 1850 the Boston ice trade was extended to every large port in South America and the Far East. The Boston merchants found East-India products with which to fill their ships for the homeward voyage and turn over the profits they made on outward cargoes. In 1857, ninety-six of the hundred and twelve vessels that loaded at Calcutta for the United States landed their cargoes at Boston, earning an average freight of twenty thousand dollars.

The homeward voyage from Calcutta was not so pleasant as the cool outward passage. Various forms of insect life came aboard with the jute and gunnies, and propagated with surprising rapidity. Whoever left his boots outside his bunk (it is said) found nothing in the morning but the nails and the eyelets. An arrival from Calcutta in Boston (I have been told) was sometimes announced by a pack of terrified dogs running up State Street pursued by an army of Calcutta cockroaches.

The ice business increased to such an extent that by 1841, although pushed by fifteen competitors, and forced to lower the retail price to one cent a pound, Frederic Tudor was able to pay off a debt of a quarter-million, contracted by his early experiments.

When, at the Court of St. James, our ambassador, Edward Everett met the Persian ambassador, his first words were an appreciation of the benefits of American ice in Persia. For a generation after the Civil War, until cheap artificial ice was invented, this export trade increased and prospered. Not Boston alone, but every New England village with a pond near tidewater, was able to turn this Yankee liability into an asset, through the genius of Frederic Tudor.

The center of the business was Gray's (later Tudor's) Wharf, Charleston, Mass. There the ice was brought by pung (box sled) or train, as it was needed, from the ice-houses at Fresh Pond and other lakes in the neighborhood. In the winter of 1846 a hundred Irishmen, with Yankee overseers, came from Cambridge every day to get out the ice from Walden Pond, where Thoreau was dividing his time between the study of nature and the Indian philosophers.

"Thus it appears," he writes (Walden, chapt. XVI)"that the sweltering inhabitants of Charleston and New Orleans, of Madras and Bombay and Calcutta, drink at my well....the pure Walden water is mingled with the sacred water of the Ganges. With the favoring winds it is wafted past the site of the fabulous islands of Atlantis...and floating by...the mouth of the Persian Gulf, melts in the tropic gales of the Indian seas, and is landed in ports of which Alexander the Great only heard the names."

Reading No. 5

BUILDING AND USING MODELS IN ECONOMICS

Model building is a major tool of analysis and research in economics and in science in general. But models and model-building are common to everyday life--model airplanes, road maps, Twiggy, dress patterns. This short essay describes what models are and why they are important.

Models are Abstractions

All models, whether they are used in everyday life, in natural science or social science have certain common attributes. All models are abstractions, which describe some part of the real world. To abstract is to withdraw, separate, take away. For example; a road map is a model which helps us find our way from one geographical point to another. When someone makes a road map of California he must abstract from the reality of the hundreds and thousands of square miles of land and the tens of thousands of miles of highway only those features which will enable the traveler to find his way from point x to point y. When he has finished, a small piece of paper with lines, numbers, and letters printed on it stands as a model of ~~our~~ a whole state and ~~our~~ a highway system. The circular flow diagram is also an abstraction--an abstraction of economic reality.

> A model is a simplification of reality which, by reducing the complexity of reality, allows us to see reality and relationships more clearly.

Without models, the world would always appear so complex we could never understand it. By simplifying reality, models enable us to build up our knowledge of the world a step at a time--to go from the simple to the complex.

Because models are abstractions from reality, they are never completely realistic. The usefulness of the road map is not reduced by the fact that it is unrealistic. A flat paper surface colored red, black, blue, green, purple and orange and full of words and symbols is far from the reality of our real landscape. A model's value is judged by its usefulness, not its resemblance to reality.

The Purpose of Scientific Models

In daily life and in both the natural and social sciences, we use models as ideals, and for explanation, analysis, and prediction. We work and we live with the help of models.

1. Models of explanation show relationships and they help to explain or teach complicated things. Cut away gasoline engines show how engine parts are related; the circular flow model shows relationships between firms and families; anatomy diagrams show how muscles, tendons, sinuses fit together, and toys such as the Visible Man or Woman show the human skin, skeleton, and viscera.
2. Models of prediction allow us to predict what will happen in the future if some set of conditions exist in the present. We often predict our arrival time at the end of a drive. In this case, we have used a road map, the average speed of the car, and the time of departure in order to predict when we will arrive. Scientists and engineers carry out the same basic process when they build a model to guide a moon craft to its destination. Obviously, a computerized guidance and tracking system is more complex but the principle is the same. Chemical equations which predict what will happen when certain chemicals are joined are models of prediction, and the same is true of the economists mathematical equations which predict what will happen if the federal government raises or lowers taxes.

The examples of models of prediction can easily be expanded; for example, there are models for predicting election results, eclipses of the sun and moon, weather, tides, population growth, prosperities, and depressions. Many of these models of prediction have an effect on our behavior. When we know a model has predicted something, we often react to this knowledge by changing our behavior. There are even models to predict what our responses will be to the predictions made by other models. We not only use models to live, we also live in response to them.

3. Models which serve as ideal patterns allow us to compare the real world with an ideal world in order to identify changes which would be needed to bring the real world closer to the ideal. A model student who gets straight A's wins four letters, and is student body president gives us a basis for judging the performance of real students, and the model of a perfectly competitive market enables us to see what effect market restrictions have on the allocation of resources. A model of an ideal economic society such as communism, capitalism, or socialism (Unit I, Lesson 6) allows us to compare our real world to an ideal world and thereby to suggest changes which will bring the real world closer to the ideal. In that lesson, Professor Friedman presented a model of how much more responsive a market economy is to the wants of the people than is one with a large degree of government control. Such a model gives a basis for making policy decisions about the economic policies of the government. Professor Friedman's ideal model is, of course, criticized by Professor Slichter who claims that a free market economy would be less likely to satisfy our wants than the one we have now.

What Makes a Model Good?

Most Models are Necessarily Unrealistic. However, this necessity does not always impress students. Many students have trouble using models because models are not realistic--it is extremely difficult for these students to believe that it is useful to apply an abstract model to a real world. Therefore, it is necessary to deal directly with the question of "what makes a model good?"

A model is valid if it performs the function it is designed for. If the road map allows us to go from x to y, if the chemical formula allows us to make the solution we want or if economic models of perfect monopoly allows us to predict how an actual business firm will act in the market, then each of these models is valid. If we get lost using the road map, we can't make the solution we want, or the business firm we are studying acts in an unpredicted way, then each of these models is invalid.

A model is neither "true" nor "false" because a model is not reality. If we had a road map of California which was a mile long and one-half a mile wide which had hills and valleys and lakes and rivers with real water, and highways with real paving, it would look much more realistic than road maps we get from service stations, but if it did not allow us to find our way from point x to point y it would be invalid. Furthermore, even if it was valid, it would not be very useful. In striving to make a road map which was as close as possible to reality, we would have made one which wasn't useful. We would have added more things from the real world than the model needed to perform the function for which it was designed, namely to allow us to find our way from point x to point y.

There are valid (useful) models and invalid (useless) models. We are only interested in those that are valid-useful--that is, the ones which perform the function for which they were designed.

NEGRO INSURRECTIONS: THE CRISIS OF URBAN AMERICA

Beginning in 1963 the long-hot summer came to the cities of America in the form of negro ghetto riots. New York, Chicago, San Francisco and Los Angeles and many other cities were struck by riots and Watts (the Los Angeles ghetto) became a symbol of negro defiance of white rule. In the summer of 1967 the riots became insurrections and Newark and Detroit acquired an unenviable new place in the history books.

Clearly American society faces a new and terrible crisis as the American people grapple with the ~~a~~ manifold problems of their urban culture. Other than the Vietnam war no problem arouses deeper emotions among the people or divides them more profoundly. White or Black, rich or poor, urban or suburban every American must face this urban crisis.

The following readings appeared in the press in the two weeks after the Detroit insurrection. These are typical of the documents historians next year and 100 years from now will use to write this chapter in American history. These readings present all the social and economic issues of freedom, justice, progress, stability and security. They should be carefully analyzed and compared with the most recent writing on the subject of America's urban ghettos.

Reading No. 1

THE HARD-CORE GHETTO MOOD*

*Newsweek, August 21, 1967, pp. 20-26.

Bob Adelman

The children of the city of destruction: 'We in a war'

The Hard-Core Ghetto Mood

He is a child of Detroit's ravaged ghetto, a lanky, spidery-legged kid whose hand-me-down pants stop a shin's length short of his narrow, pointy shoes. He sat with some of his pals on the railing outside an apartment house, gazing dully across Dexter Avenue at a block of charred ruins. It had been two weeks, but the acrid scent of smoke still hung in the air.

"Those buildings goin' up was a pretty sight," the long-legged kid said. "I sat right here and watched them go. And there wasn't nothin' them honkies could do but sweat and strain to put it out."

"Yeah, man," a pal chimed in, "it's about time those honkies started earnin' their money in this neighborhood."

"You know," said Long Legs, "we made big news. They called this the country's worst race riot in history."

"Yeah," said another gangly kid, straddling the railing. "My kids goin' to study about that in school and they'll know their old man was part of it."

"We got the record, man," exulted another youth, the beefiest of the lot. "They can forget all about Watts and Newark and Harlem. This is where the riot to end all riots was held."

"That little girl that got shot, man," Long Legs said. "She shouldn't have been shot."

"That's the breaks, brother," Beefy replied, absently patting at the deep waves in his processed hair. "We in a war. Or hasn't anybody told you that?"

Everybody laughed.

They are another country, a land behind the looking-glass, a people as tragically distant from the ken of most white and many Negro Americans as the dark side of the moon. For decades, their world was invisible; now, in this fourth long, hot summer, it stands silhouetted in the light of a thousand fires—and as remote from understanding as ever. "First—let there be no mistake about it—the looting, arson, plunder and pillage which have occurred are not part of a civil-rights protest," Lyndon Johnson said in his post-Detroit television report to the nation. "That is crime—and crime must be dealt with forcefully, swiftly, certainly . . ." It was an accurate statement of the American law and the American will. But the hard-core ghetto—and particularly the ghetto young—speak quite another language.

Excite and Chill: And their tongue, in an hour of national peril, is well worth understanding. It is not the common tongue of Negro Americans. It tends at once to excite and chill those Negroes who have struggled somehow into a growing black middle class. It troubles many of the ghetto poor themselves—particularly the older poor whose lives are centered on the day-to-day issues of survival. It is instead the lingua franca of a minority within a minority: the angry young men consigned from broken homes through inadequate schools to a future of work at poverty wages—or, for more than one ghetto youth in four, the dole and the streets. It is the language of the people who make riots—and its use is spreading fast.

It is also the language of a garrison state. In the view from the street corners of Harlem or Watts or Detroit's West Side, the riots are rebellions, the rioters not criminals at all but the freedom fighters of an oppressed, beleaguered, powerless colony of the white world downtown.

Words of bitterness suppressed for generations become the common currency. Stokely Carmichael and Rap Brown are the heroes because they say aloud, on national TV, what older Negroes had hardly dared think. "I hope you don't expect me to rap Rap," says a pert Harlem girl of 18 who wears her close-cropped "natural" coif almost like a flag of liberation. "He's kinda crazy—but it's a feel-good crazy."

There is now an air of desperation in the ghettos. Some say Whitey may listen; others actually believe he might even contemplate a Final Solution of concentration camps and gas chambers; but many of the ghetto young think the risk is worth all—even a man's life. Ed Bowen is a high-school dropout of 26; he fled from one failure to another, in the Army in Georgia, where he stole a jeep, wrecked it and was cashiered just thirteen days before his honorable discharge was due. Now he is back scuffling in Harlem, and he says: "People have been begging for years for a decent place to live, a job, some food, but they ain't got nothing, so they burn things down and maybe they'll get it." Bowen is, relatively speaking, an optimist. Others simply expect to die fighting—and are beyond caring. "I don't mind gettin' killed," says Donald, a jobless, 19-year-old corner boy in Chicago. "When I'm dead, they'll tell my kid, 'He died for a good cause'."

Chronic Riot: The cause, as the street corner sees it, is to seize the white man's attention by force, since a decade of nonviolent protest seems not to have altered the ghetto's life materially, and to make him look at what he has wrought. The riots are blind, deadly, destructive, criminal, yes—but to say they have nothing to do with "civil rights" is quite to miss the point. The rioters range, says Dr. Alvin Poussaint, a Negro psychiatrist at Tufts University, "from the plain damn angry to those with fantasies of taking over, to those who want a TV set, to those angry at their father and mother, to those caught up in hysteria, to those who will act only when they see the cops shoot someone." But he adds: "Rage is common to all of them." The rage is directed at the cheated hopes, the despond and finally the suffocating emptiness of the ghetto. "The chronic riot of their day-to-day lives," says Negro psychologist Kenneth Clark, "is, as far as they're concerned, no better than the acute riots . . . They don't have anything to lose, including their lives. It's not just desperation—it's what-the-hell."

Nor can the riots be written off as merely the holiday of the chronic criminal. In the benchmark insurrections of four summers—Watts, Newark, Detroit—roughly half the Negroes arrested on miscellaneous riot charges had no police records at all. "There is a growing body of myths emerging about the riots," said a UCLA task force reporting on a newly completed two-year study of Watts. "They center around the effort to distinguish between the 'good Negro' and the 'bad Negro' . . . This leads to the numbers game of guessing the percentage of 'bad Negroes' (2 to 5 per cent seems to be popular) and to a rationalization of better use of police power to deal with them." The task force's findings were quite to the contrary: its study indicated that 15 per cent of adult Watts Negroes actually joined the riot and 35 to 40 per cent more were "active" —and approving—spectators. And afterward, one Watts Negro in three approved of the riot; the majority who disapproved often expressed sympathy with the rioters or a sort of community pride that they had made the invisible man visible around the world.

Pride, indeed, is the first stunning fact discovered by the alien—and most whites today are alien—who crosses the line into that other country. "There's some sort of emancipation in it," says Poussaint. "It's like a festival, a sudden release of tensions, a feeling that they have freed themselves." Frederick J. Hacker, a white University of Southern California psychiatrist who crossed the line into postwar Watts, came back with similar findings. As Watts saw it, Hacker wrote, the riot "was the metamorphosis of the Negroes . . . from victims—historical objects—to masters . . . The people of Watts felt that for those four days they represented all Negroes; the historic plight of the Negroes; all the rebellions against all injustice. . . . What must be understood by the rest of America is that, for the lower-class Negro, riots are not criminal, but a legitimate weapon in a morally justified civil war."

The sense of accomplishment is, of course, misplaced. The Watts riot did evoke successive visitations of the National Guard, the governor of California and whole platoons of social scientists, social workers and social engineers, all with precious little impact on the day-to-day facts of life in poverty. Yet the anniversary of the riot is still memorialized in a weeklong summer festival, and not even Mayor Sam Yorty—a man little noted for his pre-riot attentions to Watts—feels he can afford to stay away. "Watts is not a rat-infested slum like you find in the East," Yorty beamed at the opening of Watts's second birthday party last week, "and the true face of Watts is represented here today."

Maybe. But one very real face of Watts today is the face of victory—the face of the invisible man made visible. Efelka Brown, 29, is the assistant manager of a newly opened service station where Watts's equivalent of the Veterans of Foreign Wars, the "Sons of Watts," will train the idle young in a tradeable skill. "We rioted in Watts," says Brown. "The Man put up the doctors' building down the street, they going to build us up a clinic and the way I heard, people don't have to pay but a dollar a year and that's for paper work. They have did this for us after the riot. What are these people riotin' about in other cities? They want recognition . . . *and the only way they goin' get it is to riot. The* only *way . . . We don't want to overthrow the country—we just want what we ain't got."*

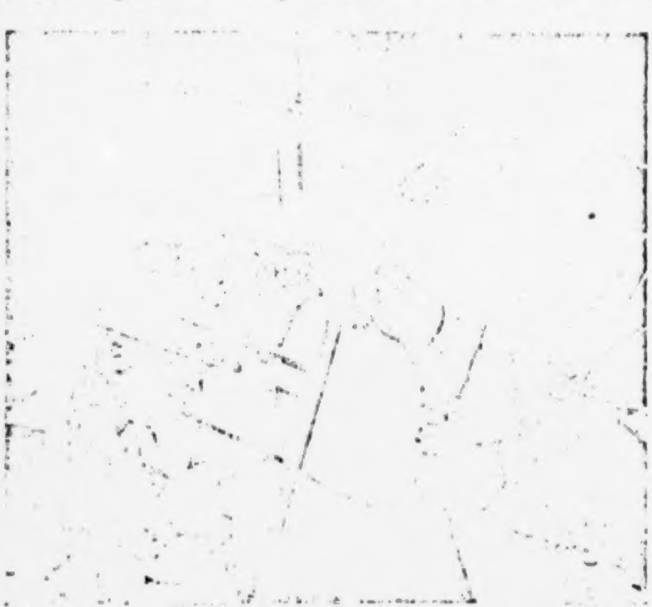
And there is the equally real face of defeat. On the burnt-out block called Charcoal Alley No. 1, Henry Leonard Johnson Jr. lay flat in the grass, slugged at a 50-cent bottle of Applejack wine and delivered a soliloquy to a relentlessly sunny and utterly indifferent sky. He had, he announced, spent twelve of his 28 years in jail; as a consequence he could not find work; there is a car-wash job in Torrance, but Torrance is 20 miles away and Johnson has no car. So he lay in the grass and sipped his wine and told the sky, "F-- Whitey. I don't believe in nothin'. I feel like they ought to burn down the whole world. Just let it burn down, baby."

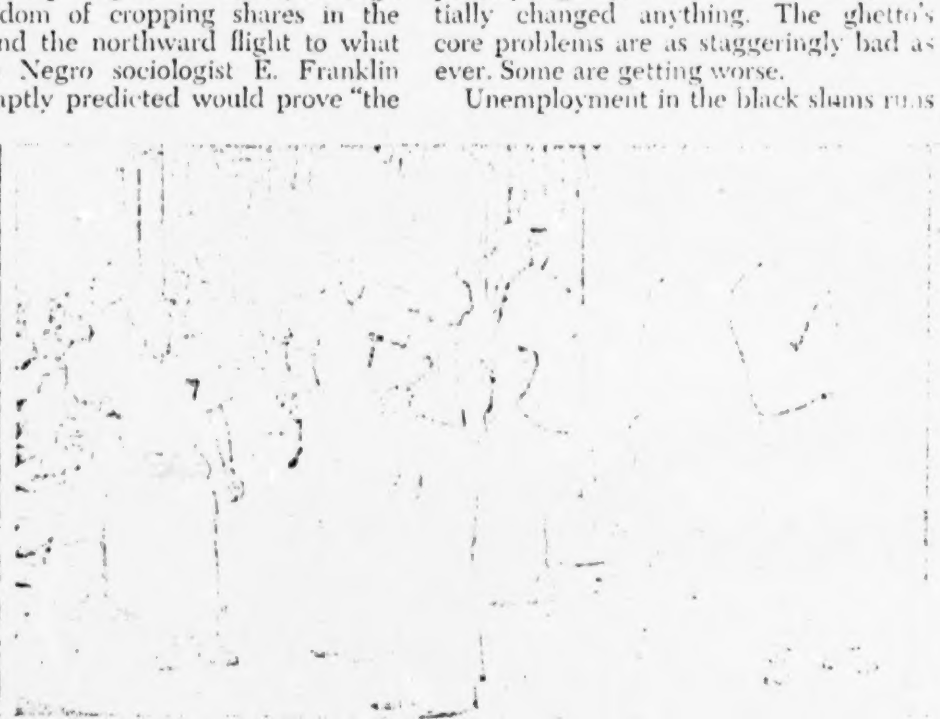
Henry Leonard Johnson Jr. is an authentic American monument—a ruin of the Negro's passage from slavery through the serfdom of cropping shares in the South and the northward flight to what the late Negro sociologist E. Franklin Frazier aptly predicted would prove "the city of destruction." The South, which preens itself today on having escaped the most savage of the slum rioting, prepared the Negro for that passage by bringing him up a segregated, semiliterate field hand. And the North, which often fancies that it has been laboring toward full equality since Emancipation, tends to forget that segregation was tacitly accepted national policy at least into the 1940s and 1950s (when Harry Truman abolished it in the armed forces and the Supreme Court outlawed it in the schools). The invisible man is quite painfully aware that he has been visible mostly when he made himself so. "The riots," says Berkeley sociologist Robert Blauner, "are the culmination of ten years of organized protest . . . [The school decision in] 1954 was the last time a basic change in race relations was brought about by a white institution. Now the Negroes themselves have become the prime historic factors, not just the objects of history."

Prisoner of History: Yet the Negro remains, in the city of destruction, a prisoner of his history. He is the last of the immigrants. A black population that was three-fourths Southern rural in 1910 is three-fourths urban today, and the northward exodus has spilled 5.3 million black newcomers into the ghettos since 1950. The Negro arrived with few more marketable assets than a strong back at precisely a period of history when strong backs were becoming obsolescent. The new technology swallowed up unskilled and semiskilled jobs; now machines dig ditches, wash dishes, run elevators. The new suburbia drained off middle-class whites; two big cities (Washington and Newark) have black majorities today and 23 others may have by 1982 at the ghetto's present explosive rates of birth and migration.

Nor has the spate of civil-rights and poverty legislation of the 1960s substantially changed anything. The ghetto's core problems are as staggeringly bad as ever. Some are getting worse.

Unemployment in the black slums runs





produced—notably in the U.S. Congress—has been a response in kind. There is the widespread superstition that to attempt to understand the roots of rioting is to condone the riots, that to act would be to reward the rioters. It was in just such a spirit that the House laughed down a $40 million slum rat-control program. Snorted sociologist Hauser afterward: "The Marie Antoinette Congress. 'Let them have rats'."

Even among those disposed to listen, the riots have produced a wave of confusion—and a sense not of defeat but of the failure of all that has been done so far. "The riots themselves are the best evaluations of what's been done," says Kenneth Clark, and even some of the Great Society's own architects agree. Civil-rights legislation has been largely directed at Southern-style Jim Crow, not the ills of the Northern ghetto. Urban renewal has tightened the white noose around the black slums. An undernourished poverty program has reached no more than 10 per cent of the 2 million adult poor and the 1 million jobless young who need training or experience to get work. Some of the idle have been trained for nonexistent jobs. There is a recognition at once that vast sums of money are needed and that money alone will not do the trick. "Administratively," says Ralph Gakenheimer, a University of North Carolina city planner, "the easiest thing to do is spend money." But few cities spent as much as Detroit, and now a sobered Washington topsider says glumly: "There will be more Detroits."

Lost Generation: For no one imagines any longer that there will be any quick solutions. The talk now, among urban-affairs experts in and out of government, is that only a massive public commitment and at least a generation of effort will be required to repair and thus pacify the ghettos. Some feel a generation has been lost already—the disaffected down-and-outers among today's ghetto young. "There are a number of Negroes already who can't be won back," says a Negro government civil-rights man. "From here on there will be revolutionaries, and offering them a job, a TV or a car will no longer bring them back."

Yet there is a feeling that beginnings must be made. The dialogue in black and white must be restored; some public men try, as does New York's Mayor John V. Lindsay on his frequent walks through Harlem and Bedford-Stuyvesant, but he remains an exception. Everyone agrees that ghetto schools must be upgraded, though there is no unanimity as to means. Moynihan, among others, recommends a flat government family allowance for all parents with no strings attached—a program in operation in every Western industrial democracy but the U.S. There is a spreading distrust of the government bureaucracies that have failed in the past; the new liberalism holds that corporate imagination—and corporate money—must somehow be drawn into the fray. Robert Kennedy, for one, has long argued for tax incentives to stem industry's drift to the suburbs (three-fifths of all new plants since 1954 have been built outside the central cities) and to get factories—and jobs—into the ghetto. The Administration's own rent-supplement program—lately put down by Congress—amounted to a subsidy for privately built low-income housing

But most short-term strategies center on jobs—as many and as quickly as possible. A spreading school of thought believes that the government ought to be the employer of last resort and guarantee work for the unskilled who cannot find it elsewhere. "For instance," says Chicago Urban League director Edwin C. (Bill) Berry, "mail carriers. If we had two mail deliveries a day, we'd open 60,000 jobs. For instance, teachers' aides . . ." And the heaviest stress is on "meaningful" work—not WPA gravel-shoveling but jobs where a man can master a useful craft and earn a living wage. The presumption is that jobs will prove to be not just a stopgap but a way of breaking the vicious cycle of slum life. "Nothing will motivate kids more than evidence that education will really lead some place, to good jobs and new mobility," says a New York City planner. "And it helps if there is a father with a decent job at home in a decent house to provide an image."

Out of Prison: Where the short-run solutions stress the reconstruction of the ghettos themselves, the longer-run strategies point toward ultimate dispersal of the blacks out of the prison of the central cities. The defeat of Mr. Johnson's fair-housing bill last year—almost certain to be repeated in this Congress—was demonstration enough that any such diaspora is politically improbable now. Yet the White House is increasingly persuaded that the pressure of the ghetto's explosive growth is the real root of the problem—and that it will only get worse if the tide continues. The talk now centers on encouraging the creation of new towns—on saving the old cities by turning away from them and making new communities with low-cost housing and integrated living built in from birth.

But money is short: Vietnam taxes the nation's resources and absorbs the President's attention; the rioters demand attention and whip up that sting of fear and hostility called the white backlash; and in the Senate of the United States, Everett McKinley Dirksen, the leader of the Republican opposition, questions Brice Kinnamon, the police chief of Cambridge, Md., about the state of race relations in that recently riot-scarred Eastern Shore town.

"Do you have, according to the common definition, a ghetto in Cambridge?"

"No, sir," Kinnamon replied.

"They speak of Harlem as a ghetto," Dirksen goes on, "a place where—oh, a racial group may be segregated somewhat. You have no ghetto."

"No, sir."

"Do they live—do the nonwhite live any place in town where they can find a house?"

"I do not know of any way they can stop them from buying them," said Kinnamon, "but they do live in their own section."

"They live in their own section."

"Yes, sir."

"For the most part."

"Yes, sir."

~~And the clock is running.~~

~~Percy Wiggins went into the Army with a police record, served a year in Vietnam, came home to Chicago three months ago confident that his service record would help him land a job. It hasn't, and now Wiggins is bitter. "I couldn't even get a job driving a cab," he said. "The lowest job in the world and I~~

Ken Wittenberg

Growing up in the ghetto: 'We just want what we ain't got'

THE SHIFT FROM MODERATES TO MILITANTS: A SEPARATE PATH

Reprinted from Life Magazine, December 13, 1968, pages 82-89

This is the conclusion of LIFE's series on the history of the Negro in America. The first three sections appeared in the issues of Nov. 22 and 29 and Dec. 6.

The great decade of civil rights progress—from 1955 to 1965—found its victories in an appeal to the conscience, the laws and the pragmatism of white America. Three of the men at right can claim as much credit as any for those victories. Thurgood Marshall, Whitney Young and Martin Luther King Jr. spoke *for* the black man, *to* the white. Their demands marked a new surge in the black Americans' drive for equality.

Thurgood Marshall, named last year to be the first Negro to sit on the Supreme Court, appeared before that same Court 32 times during his 23-year tenure as counsel of the NAACP. From 1938, when he appeared before Southern courts where Negro lawyers had never before handled civil rights cases, Marshall built a series of victories that culminated in *Brown v. Board of Education*, decided by the Supreme Court in 1954. To win that final battle, Marshall gathered the support of historians, sociologists and educators to persuade the Court that separate schools are "inherently unequal."

While the NAACP pursued its traditional legal goals, the National Urban League, headed since 1961 by Whitney Young, turned up the heat under America's employers. Young, a sophisticated and forceful bargainer, has sat on presidential commissions with enough executives to make up a Who's Who of American business. He has instant access to most of America's executive suites. But he enters them with a basic set of demands—jobs for Negroes and particularly in positions that will let the lower-echelon managers know that the company isn't kidding when it claims to be an "equal opportunity employer." Young's style of persuasion does not produce dramatic publicity. But it does make for hopeful statistics of Negroes moving into white-collar jobs.

While the NAACP attacked on the legal front and the Urban League on the economic, Dr. King, as head of Southern Christian Leadership Conference, forced the nation to consider its moral stance. More than Marshall or Young, Dr. King spoke to his own people. But his words were—and were meant to be—overheard by white America. King fashioned an American version of Mahatma Gandhi's prime weapon, nonviolent resistance, and for 10 years he and his followers sat-in, walked-in and waded-in across the South. The days King spent in Southern jails furthered his cause as much as did his eloquent speeches. In 1964 he won the Nobel Peace Prize. And in 1968 he was assassinated.

In one sense, the successes of '55-'65 spawned the turmoil of the late '60s, the angry militancy, the outbreaks in the ghettos. Implicit in the legal victories was a guarantee of equality that many white Americans were not prepared to grant. The real restraints, the prejudices woven into the fabric of society, could not be argued out of existence before the Supreme Court. Now that the legalistic wrappings had been torn away, these real restraints stood revealed and many Negroes despaired of ever getting clear of them.

The man who spoke most clearly to those who despaired was Malcolm X. While Marshall and Young and King were telling whites, in effect, "look what you have done to us," Malcolm X spoke to the Negroes, not *for* them, and he told them "look what you can do for yourselves." He jarred the sensitivities of whites—particularly liberals—by telling Negroes to "stop begging favors from whites—but get up off your knees and fight your own battles." He demanded that blacks draw back into themselves, not physically but emotionally, to relearn their African roots, to merge their efforts for maximum effect, but most of all to assert their manhood as something that they already have, not as a civil right that they must bargain for.

Malcolm X spoke to the ghetto that he knew better than most. He had gone the route of petty hoodlum, thief, dope pusher and pimp to a 6-year jail term. The puritanism of the Black Muslim faith, which he adopted, drained his vices. And his native intellect, belying a ninth-grade education, soon made him the most effective of the Muslim spokesmen. With maturity, Malcolm came to question much of the simplistic rhetoric of the sect, particularly the notion that all whites are by definition the devil. He died before he could fully develop his new stance. To a considerable degree the young black men quoted on the following pages share and carry forward the thoughts of Malcolm X.

These nine men lead widely different lives, but in the main they are activists, putting their views to daily use. Two are ministers, one is a neurosurgeon, another is a state legislator and there are a poet and a comedian as well. One, Eldridge Cleaver, is a fugitive. A felon with a record to rival Malcolm X's, Cleaver gained stature with an autobiography and his work as information director of the militant Black Panthers. Accused of breaking parole, and faced with more years in jail, he went into hiding.

Different as their lives are, their thinking, as revealed in recent interviews with LIFE, shares the common thread of separation. They are not interested in a back-to-Africa migration or the more recent proposal that five Southern states be turned into some sort of mammoth reservation.

The separation that they favor is physical in a sense—within the ghettos. It is separation in a social sense—they oppose an integration that would submerge a weak minority of 10% under the weight of a majority of 90%. Phrased in nine different ways, they are talking about Black Power, about combining efforts so that black Americans can exert a leverage on the nation's policies.

There is no point in arguing how many of America's Negroes these nine speak for. The point is that right now these are the men who are speaking *to* black America, and are being heard. Next year the list might be different. The movement toward Negro equality has a history of wearing out its prophets early. Still, these are the words that right now are coming through most clearly.

Jesse Jackson

A lieutenant of Martin Luther King . . . ordained this year as a Baptist minister . . . from his church in Chicago he directs Operation Breadbasket which gets action on Negro demands through boycotts of national firms . . . young (27), with it . . . as a college student in Greensboro, N.C., led the protest against segregated restaurants.

‘Some call our private world the ghetto. But I call it the colony because social institutions did not create it—economic institutions created and maintain it. We must act to control our colonies through communications, economics and politics. We have been trained to be consumers rather than producers. Consumption leads to fatness but production leads to power. With our Operation Breadbasket we can channel the energies of our people. Some militants have a nihilistic sense, a feeling of futility; they have never won anything from white people and don't think they can. Therefore when we say the blacks should take over A&P in the ghetto, it is one way towards making militancy meaningful. We would rather own A&P than burn it. When we get in our own managers and products it has a maturing effect on these militants. Once they win a battle, they are ready to join in long-term struggle. We may still be economically insecure, but whites are psychologically insecure. America can't rest until we have one definition of man. America is schizophrenic—the ideal of democracy versus the reality of racism.’

Roy Innis

Born in the Virgin Islands . . . college-trained chemist before he turned full time to civil rights . . . At 34 national director of CORE . . . the man most responsible for that group's shift to black nationalism . . . urbane, sophisticated.

‘Black nationalism is the philosophy of self-determination, the philosophy of an oppressed people. Oppression can occur in one's homeland or in the homeland of the oppressor. And the latter has been suffered by only two great peoples—the Jews and the American blacks. One solution to such oppression is assimilation—in the essence, the loss of one's self. Moses tried the other solution—with his flight from Egypt. That won't work for us. We have to devise a philosophy applicable to our own dilemma. We must rehabilitate blacks as a people. We must control the institutions in our areas. We must deal with our problems as one whole—not individually as economic, political or social. Integration is a total failure. We must continue as a separate entity.’

Albert Cleage Jr.

Pastor of a militant church, Detroit's Central United Church of Christ, which he has named Shrine of the Black Madonna . . . leads his congregation in worship of a black Messiah . . . in 1964 he founded the Freedom Now party and was its candidate for governor.

‘My concern is bringing the black church into the struggle. What black ministers have learned about white man's Christianity is invalid; they must rebuild the worship service and the approach of the church. When I go back to the Old Testament; knowing that the Israelites were black and were caught up in a struggle for nationhood, it seems to me that many of their festivals and holidays should be incorporated into the black church. Passover is a remembering of one's time in bondage while celebrating freedom from slavery. The Old Testament is the text for black power, black pride, the search for black identity. We are a people seeking mental health. We've been sick a long time. The white man has always asserted that black is ugly. It's written into the language. Anything distasteful is black. It was a black day. You're blackballed out of a fraternity. If black and white are ever to coexist there must be candid acceptance that black is just as beautiful as white. And just as good.’

Dick Gregory

Successful comedian who finds little time now to be funny . . . was Freedom and Peace party candidate for President . . . now 36 . . . crusader for the rights of all the outs—his own people, the Indians, the hippies in Chicago.

‘Black people have a bond—unequaled in this country—in the memory of shared insults. A rich white man will never be insulted in the same fashion as the richest black man. But the richest black man will be insulted for the same reasons as a black man without an income. All this talk about separatism—it's just a word to fascinate white folks who enjoy denouncing it. We are separated right now, and we want to control our areas. We will take this control if we have to. Not violently, but we will take it. Revolution means destroying your own. A black revolution means tearing up the black community. It cannot be without pain, but we will free ourselves from our hangups. I became involved when I stopped and realized that male animals are put on earth to reproduce—but that man was put here to make this place better for other men. I made my decision to be a man.

The structure is being tested not by blacks alone. White kids have hit the system and it won't stay like it is. White parents can't use the word "nigger" because their kids won't let them. These kids won't conform to society's old image. A kid can be number one in his class, but his long hair and clothing make his parents ashamed of him. These young kids are pushing and they won't stop. When America can be as aware of injustices at home as she is of the ones around the world, then she'll be a truly vital society. When we can make democracy work, we won't have to force it down other people's throats. If it really is such a good idea, and if they can see it working, they'll steal it.’

LeRoi Jones

Talented playwright . . . poet of black nationalism . . . eloquent militant whose advice now is "cool it" . . . leader, at 35, of Newark's United Black Brothers voter registration campaign to gain control of a city that is black by majority.

‘How can anybody live in this world without seeing what's going on? We began as slaves and have never existed to the Man as human beings with rights equal to his. During the rebellions here in Newark, Negroes who were looking out the windows were shot because they were black. Negroes who believe they can slip into the white man's society are badly mistaken. The old established Negro leadership reflects white attitudes, urging patience after 350 years of patience. These leaders have the money, which whites are all too eager to give, to keep us down. And that represents power. Now they're going to have to be our leaders or nothing.’

Eldridge Cleaver

Convicted felon who served his time for possession of drugs and criminal assault . . . in his cell wrote an important document of the rebellion, "Soul on Ice" highly praised collection of essays and letters . . . went into hiding to avoid a return to jail as a parole violator . . . now 33, a spokesman for the coldly militant Black Panthers

‘The slogan "Black Power" was recognition of a change in the psychology of black people. They have seized on their blackness and have rallied around it—around the central element for which they were oppressed. Now they have turned the focus of their oppression into the focal point of the struggle for liberation.

There is power in our communities but it is held by outsiders—or by traitors. They drain the prosperity out of our communities and take it home with them into the suburbs. The strong-arm men, the police, are there to see that we don't budge. But we are going to move anyway. The survival of our people depends on it. By struggling against the conditions we live in we're simply continuing the struggle of our ancestors up out of slavery. And we are reaching the end of our people's long hard struggle.’

Harry Edwards

A tower of a man—6' 8" and 250 pounds . . . now 26 . . . rejected pro football offers to work for Ph.D. in sociology . . . was assistant professor of sociology at San Jose State College . . . leader of black boycott of '68 Olympics.

There are going to be more protests in the future. Black athletes in America have been used as symbols of a nonexistent democracy and brotherhood. This was the only place we were allowed to have heroes—but always on the white man's terms. Joe Louis could be idolized but Muhammad Ali was crucified by the Man. We have to get away from the tragicomic obsession with white folks. They are irrelevant. We are against the system—not against groups of whites. We must move against the institutions that the system reveres. The Man will send a regiment to protect a building but would not put the same effort into improving the conditions of human beings.’

Thomas Matthew

Respected New York neurosurgeon . . . 43 years old . . . gave up much of his practice to found N.E.G.R.O., self-help corporate combine that issues bonds for as little as 25¢ and runs a hospital, apartment houses, small factories, bus lines in Watts and New York.

‘Integration is a technique, not an end or an absolute. It has its proper place if circumstance gives it validity. Perhaps far in the future circumstances will be such that integration will benefit both blacks and whites. But integration will never work as long as it is only thought of for the black man's benefit. In the past integration has been a form of paternalism. The black bourgeoisie and intelligentsia thought that if they attained the privilege of being with whites it would solve all their problems. This has been a part of our inferiority complex. Now some of our people are loosening up, freeing themselves inside. There is no longer an extra internal jump when one hears the word "black" used in public. Here at N.E.G.R.O. we are trying to build a bridge between the black bourgeoisie, who have resources, education and talents, and the masses of black people who are in desperate need of leaders. The middle class has to be reminded that it exists at the sufferance of the white man. Their future is with the black masses, using their skills where they're really needed.’

Julian Bond

Nationally known since the Democratic Convention . . . at 28 headed the irregular Georgia delegation . . . in 1965, elected to the Georgia House, where Negroes had not served since 1908 . . . denied his seat for antiwar statements until the Supreme Court took his side.

‘Although I can't absolutely envision whites putting us in concentration camps, aren't they on the way to making the ghetto a concentration camp of sorts, with increasingly repressive police measures? I hope we can form a new coalition for action, not promises. Blacks were promised that patience would bring justice. Whites were promised that justice would bring order. But it was all promises, not progress. We face two alternatives: to strive for the day when the nation that fights wars to make the world safe for democracy can assure its citizens that democracy is safe for them; or to smash those who now control, to seize control from their hands, to use raw power to insure that constitutional rhetoric becomes reality.’

~~of Plessy v. Ferguson, this finding is amply supported by modern authority. Any language in Plessy v. Ferguson contrary to this finding is rejected.~~

~~"We conclude that in the field of public education the doctrine of 'Separate but Equal' has no place. Separate educational facilities are inherently unequal. Therefore, we hold that the plaintiffs and others similarly situated for whom the actions have been brought are, by reason of the segregation complained of, are deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment...."~~

THE CLASSIC ARGUMENTS ON CAPITALISM AND COMMUNISM

The goals of economic freedom, justice, progress and stability are universal, but what the goals mean and how they are achieved through the economic organization of a society, distinguish one economic program from another. The following readings define Capitalism and Communism and present arguments about their relative value as alternative ways of organizing economic life. Milton Friedman, now a professor of economics at The University of Chicago, is perhaps the most distinguished contemporary proponent of 'competitive capitalism'--that is, a private-enterprise economy with minimal governmental intervention. The short excerpt by Lenin on the transition from Capitalism to Communism is a classic and is taken from The State and Revolution, first published in 1917, the year of the Bolshevic Revolution in Russia. The concluding reading in the section was written by Sumner Slichter, an eminent professor of economics from Harvard University. His statement offers a contrast to that of Professor Friedman.

Reading No. 3

Capitalism & Freedom, by Milton Friedman, Phoenix edition, 1963.

"The Relation between Economic Freedom and Political Freedom," pp. 12-16, chpt. I

"The basic problem of social organization is how to co-ordinate the economic activities of large numbers of people. Even in relatively backward societies, extensive division of labor and specialization of function is required to make effective use of available resources. In advanced societies, the scale on which coordination is needed, to take full advantage of the opportunities offered by modern science and technology, is enormously greater. Literally millions of people are involved in providing one another with their daily bread, let alone with their yearly automobiles. The challenge to the believer in liberty is to reconcile this widespread interdependence with individual freedom.

"Fundamentally, there are only two ways of co-ordinating the economic activities of millions. One is central direction involving the use of coercion--the technique of the army and of the modern totalitarian state. The other is voluntary co-operation of individuals--the technique of the market place....

"A working model of a society organized through voluntary exchange is a free private enterprise exchange economy--what we have been calling competitive capitalism.

"In its simplest form, such a society consists of a number of independent households...Each household uses the resources it controls to produce goods and services that it exchanges for goods and services produced by other households, on terms mutually acceptable to the two parties to the bargain. It is thereby enabled to satisfy its wants indirectly by producing goods and services for others, rather than directly by producing goods for its own immediate use. The incentive for adopting this indirect route is, of course, the increased product made possible by division of labor and specialization of function. Since the household always has the alternative of producing directly for itself, it need not enter into any exchange unless it benefits from it. Hence, no exchange will take place unless both parties do benefit from it. Co-operation is thereby achieved without coercion.

"Specialization of function and division of labor would not go far if the ultimate productive unit were the household. In a modern society, we have gone much farther. We have introduced enterprises which are intermediaries between individuals in their capacities as suppliers of service and as purchasers of goods. And similarly, specialization of function and division of labor could not go very far if we had to continue to rely on the barter of product for product. In consequence, money has been introduced as a means of facilitating exchange, and of enabling the acts of purchase and of sale to be separated into two parts...

"So long as effective freedom of exchange is maintained, the central feature of the market organization of economic activity is that it prevents one person from interfering with another in respect of most of his activities. The consumer is protected from coercion by the seller because of the presence of other sellers with whom he can deal. The seller is protected from coercion by the consumer because of other consumers to whom he can sell. The employee is protected from coercion by the employer because of other employers for whom he can work, and so on. And the market does this impersonally and without centralized authority.

"Indeed, a major source of objection to free economy is precisely that it does this task so well. It gives people what they want instead of what a particular group thinks they ought to want. Underlying most arguments against the free market is a lack of belief in freedom itself.

"The existence of a free market does not of course eliminate the need for government. On the contrary, government is essential both as a forum for determining the 'rules of the game' and as an umpire to interpret and enforce the rules decided on. What the market does is to reduce greatly the range of issues that must be decided through political means, and thereby to minimize the extent to which government need participate directly in the game. The characteristic feature of action through political channels is that it tends to require or enforce substantial conformity. The great advantage of the market, on the other hand, is that it permits wide diversity. It is, in political terms, a system of proportional representation. Each man can vote, as it were, for the color of tie he wants and get it; he does not have to see what color the majority wants and then, if he is in the minority, submit.

"It is this feature of the market that we refer to when we say that the market provides economic freedom. But this characteristic also has implications that go far beyond the narrowly economic. Political freedom means the absence of coercion of a man by his fellow men. The fundamental threat to freedom is power to coerce, be it in the hands of a monarch, a dictator, an oligarchy, or a momentary majority. The preservation of freedom requires the elimination of such concentration of power to the fullest possible extent and the dispersal and distribution of whatever power cannot be eliminated--a system of checks and balances. By removing the organization of economic activity from the control of political authority, the market eliminates this source of coercive power. It enables economic strength to be a check to political power rather than a reinforcement.

"Economic power can be widely dispersed...Political power, on the other hand, is more difficult to decentralize. There can be numerous small independent governments. But it is far more difficult to maintain numerous equipotent small centers of political power in a single large government than it is to have numerous centers of economic strength in a single large economy. There can be many millionaires in one large economy. But can there be more than one really outstanding leader, one person on whom the energies and enthusiasms of his countrymen are centered? If the central government gains power, it is likely to be at the expense of local governments. There seems to be something like a fixed total of political power to be distributed. Consequently, if economic power is joined to political power, concentration seems almost inevitable. On the other hand, if economic power is kept in separate hands from political power, it can serve as a check and a counter to political power."

(the Conclusion from Mr. Friedman's book is from Chapter XIII, pages196-202)

"In the 1920's and the 1930's, intellectuals in the United States were overwhelmingly persuaded that capitalism was a defective system inhibiting economic well-being and thereby freedom, and that the hope for the future lay in a greater measure of deliberate control by political authorities over economic affairs. The conversion of the intellectuals was not achieved by the example of any actual collectivist society, though it undoubtedly was much hastened by the establishment of a communist society in Russia and the glowing hopes placed in it. The conversion of the intellectuals was achieved by a comparison between the existing state of affairs, with all its injustices and defects, and a hypothetical state of affairs as it might be. The actual was compared with the ideal.

"At the time, not much else was possible. True, mankind had experienced many epochs of centralized control, of detailed intervention by the state into economic affairs. But there had been a revolution in politics, in science, and in technology. Surely, it was argued, we can do far better with a democratic political structure, modern tools, and modern science than was possible in earlier ages.

"The attitudes of that time are still with us. There is still a tendency to regard any existing government intervention as desirable, to attribute all evils to the market, and to evaluate new proposals for government control in their ideal form, as they might work if run by able, disinterested men, free from the pressure of special interest groups. The proponents of limited government and free enterprise are still on the defensive.

"Yet, conditions have changed. We now have several decades of experience with governmental intervention. It is no longer necessary to compare the market as it actually operates and government intervention as it ideally might operate. We can compare the actual with the actual.

"If we do so, it is clear that the difference between the actual operation of the market and its ideal operation--great though it undoubtedly is--is as nothing compared to the difference between the actual effects of government intervention and their intended effects. Who can now see any great hope for the advancement of men's freedom and dignity in the massive tyranny and despotism that hold sway in Russia? Wrote Marx and Engels in The Communist Manifesto: 'The proletarians have nothing to lose but their chains. They have a world to win.' Who today can regard the chains of the proletarians in the Soviet Union as weaker than the chains of the proletarians in the United States, or Britain or France or Germany or any Western state?

"Let us look closer to home. Which if any of the great "reforms" of past decades has achieved its objectives? Have the good intentions of the proponents of these reforms been realized?

...."If a balance be struck, there can be little doubt that the record is dismal. The greater part of the new ventures undertaken by government in the past few decades have failed to achieve their objectives. The United States has continued to progress; its citizens have become better fed, better clothed, better housed, and better transported; class and social distinctions have narrowed; minority groups have become less disadvantaged; popular culture has advanced by leaps and bounds. All this has been the product of the initiative and drive of individuals co-operating through the free market. Government measures have hampered not helped this development. We have been able to afford and surmount these measures only because of the extraordinary fecundity of the market. The invisible hand has been more potent for progress than the visible hand for retrogression.

"Is it an accident that so many of the governmental reforms of recent decades have gone awry, that the bright hopes have turned to ashes? Is it simply because the programs are faulty in detail?

"I believe the answer is clearly in the negative. The central defect of these measures is that they seek through government to force people to act against their own immediate interests in order to promote a supposedly general interest. They seek to resolve what is supposedly a conflict of interest, or a difference in view about interests, not by establishing a framework that will eliminate the conflict, or by persuading people to have different interests, but by forcing people to act against their own interest. They substitute the values of outsiders for the values of participants; either some telling others what is good for them, or the government taking from some to benefit others. These measures are therefore countered by one of the strongest and most creative forces known to man--the attempt by millions of individuals to promote their own interests, to live their lives by their own values. This is the major reason why the measures have so often had the opposite of the effects intended. It is also one of the major strengths of a free society and explains why governmental regulation does not strangle it.

"The interests of which I speak are not simply narrow self-regarding interests. On the contrary, they include the whole range of values that men hold dear and for which they are willing to spend their fortunes and sacrifice their lives. The Germans who lost their lives opposing Adolph Hitler were pursuing their interests as they saw them. So also are the men and women who devote great effort and time to charitable, educational and religious activities. Naturally, such interests are the major ones for few men. It is the virtue of a free society that it nonetheless permits these interests full scope and does not subordinate them to the narrow materialistic interests that dominate the bulk of mankind. That is why capitalist societies are less materialistic than collective societies.

"Why is it, in light of the record, that the burden of proof still seems to rest on those of us who oppose new government programs and who seek to reduce the already unduly large role of government? Let Dicey answer: 'The beneficial effect of State intervention, especially in the form of legislation, is direct, immediate, and, so to speak, visible, whilst its evil effects are gradual and indirect, and lie out of sight....Nor...do most people keep in mind that State inspectors may be incompetent, careless, or even occasionally corrupt...; few are those who realize the undeniable truth that State help kills self-help. Hence the majority of mankind must almost of necessity look with undue favor upon governmental intervention. This natural bias can be counteracted only by the existence, in a given society, ... of a presumption or prejudice in favor of individual liberty, that is, of laissez-faire. The mere decline, therefore, of faith in self-help--and that such a decline has taken place is certain--is of itself sufficient to account for the growth of legislation tending towards socialism.'[1]

"The preservation and expansion of freedom are today threatened from two directions. The one threat is obvious and clear. It is the external threat coming from the evil men in the Kremlin who promise to bury us. The other threat is far more subtle. It is the internal threat coming from men of good intentions and good will who wish to reform us. Impatient with the slowness of persuasion and example to achieve the great social changes they envision, they are anxious to use the power of the state to achieve their ends and confident of their own ability to do so. Yet if they gained the power, they would fail to achieve their immediate aims and, in addition, would produce a collective state from which they would recoil in horror and of which they would be among the first victims. Concentrated power is not rendered harmless by the good intentions of those who create it.

"The two threats unfortunately reinforce one another. Even if we avoid a nuclear holocaust, the threat from the Kremlin requires us to devote a sizable fraction of our resources to our military defense. The importance of government as a buyer of so muchof our output, and the sole buyer of the output of many firms and industries, already concentrates a dangerous amount of economic power in the hands of the political authorities, changes the environment in which business operates and the criteria relevant for business success, and in these and other ways endangers a free market. This danger we cannot avoid. But we needlessly intensify it by continuing the present widespread governmental intervention in areas unrelated to the military defense of the nation and by undertaking ever new governmental programs--from medical care for the aged to lunar exploration.

"As Adam Smith once said, 'There is much ruin in a nation'. Our basic structure of values and the interwoven network of free institutions will withstand much. I believe that we shall be able to preserve and extend freedom despite the size of the military programs and despite the economic powers already concentrated in Washington. But we shall be able to do so only if we awake to the threat that we face, only if we persuade our fellow men that free institutions offer a surer, if perhaps at times a slower, route to the ends they seek than the coercive power of the state..."

---

1. A. V. Dicey, Law and Public Opinion in England, (2d ed., London, Macmillan, 1914), pp. 257-8.

Reading No. 4

This READING is excerpted from V. I. Lenin, "The State and Revolution--Class Society and the State," in Handbook of Marxism, (ed.) Emile Burns, London, Victor Gollancz Ltd., 1937, pp. 743-746.

...."In capitalist society, under the conditions most favourable to its development, we have more or less complete democracy in the democratic republic. But this democracy is always bound by the narrow framework of capitalist exploitation, and consequently, always remains, in reality, a democracy for the minority, only for the possessing classes, only for the rich. Freedom in capitalist society always remains just about the same as it was in the ancient Greek republics: freedom for the slave-owners. The modern wage-slaves, owing to the conditions of capitalist exploitation, are so much crushed by want and poverty that "democracy is nothing to them" "politics is nothing to them" ; that, in the ordinary peaceful course of events, the majority of the population is debarred from participating in social and political life.

...."Marx splendidly grasped this essence of capitalist democracy, when, in analysing the experience of the Commune, he said that the oppressed were allowed, once every few years, to decide which particular representatives of the oppressing class should be in parliament to represent and repress them!

"But from this capitalist democracy--inevitably narrow, subtly rejecting the poor, and therefore hypocritical and false to the core--progress does not march onward, simply smoothly, and directly, to "greater and greater democracy," as the liberal professors and petty-bourgeois opportunists would have us believe. No, progress marches onwards, i.e., toward Communism, through the dictatorship of the proletariat; it cannot do otherwise, for there is no one else and no other way to break the resistance of the capitalist exploiters.

"But the dictatorship of the proletariat--i.e., the organisation of the vanguard of the oppressed as the ruling class for the purpose of crushing the oppressors--cannot produce merely an expansion of democracy. Together with an immense expansion of democracy which for the first time becomes democracy for the poor, democracy for the people, and not democracy for the rich folk, the dictatorship of the proletariat produces a series of restrictions of liberty in the case of the oppressors, the exploiters, the capitalists. We must crush them in order to free humanity from wage-slavery; their resistance must be broken by force; it is clear that where there is suppression there is also violence, there is no liberty, no democracy.

...."Democracy for the vast majority of the people, and suppression by force, i.e., exclusion from democracy, of the exploiters and oppressors of the people--this is the modification of democracy during the transition from capitalism to Communism.

"Only in Communist society, when the resistance of the capitalists has been completely broken, when the capitalists have disappeared, when there are no classes (i.e., there is no difference between the members of society in their relation to the social means of production), only then "the State ceases to exist," and "it becomes possible to speak of freedom." Only then a really full democracy, a democracy without any exceptions, will be possible and will be realized. And only then will democracy itself begin to wither away due to the simple fact that, freed from capitalist slavery, from the untold horrors, savagery, absurdities and infamies of capitalist exploitation, people will gradually become accustomed to the observation of the elementary rules of social life that have been known for centuries and repeated for thousands of years in all school books; they will become accustomed to observing them without force, without compulsion, without subordination, without the special apparatus for compulsion which is called the State.

"The expression "the State withers away," is very well chosen, for it indicates both the gradual and the elemental nature of the process. Only habit can, and undoubtedly will, have such an effect; for we see around us millions of times how readily people get accustomed to observe the necessary rules of life in common, if there is no exploitation, if there is nothing that causes indignation, that calls forth protest and revolt and has to be suppressed...."

Reading No.5

The following READING is from Handbook of Marxism (ed.) Emile Burns. p. 963.

THE PROGRAMME OF THE COMMUNIST INTERNATIONAL

English edition, Modern Books Ltd., 1929

"The Third (Communist) International was founded in March 1919. At the Fifth Congress of the Communist International, in 1924, a draft programme was adopted, and after considerable discussion by all national sections of the International, the programme was adopted in its final form at the Sixth Congress, in 1928. It is, in a sense, a restatement of The Communist Manifesto of 1848, in relation to the imperialist stage of capitalism."

. . . . . .

(page 984)

III. THE ULTIMATE AIM OF THE COMMUNIST INTERNATIONAL--WORLD COMMUNISM

"The ultimate aim of the Communist International is to replace world capitalist economy by a world system of Communism. Communist society, the basis for which has been prepared by the whole course of historical development, is mankind's only way out, for it alone can abolish the contradictions of the capitalist system which threaten to degrade and destroy the human race.

"Communist society will abolish the class division of society, i.e.,...it will abolish all forms of exploitation and oppression of man by man. Society will no longer consist of antagonistic classes in conflict with each other, but will present a united commonwealth of labour. For the first time in its history mankind will take its fate into its own hands. Instead of destroying innumerable human lives and incalculable wealth in struggles between classes and nations, mankind will devote all its energy to the struggle against the forces of nature, to the development and strengthening of its own collective might.

"After abolishing private ownership of the means of production and converting these means into social property, the world system of Communism will replace the elemental forces of the world market, competitive and blind processes of social production, by consciously organised and planned production for the purpose of satisfying rapidly growing social needs. With the abolition of competition and anarchy in production, devastating crises and still more devastating wars will disappear. Instead of colossal waste of productive forces and spasmodic development of society there will be a planned utilisation of all material resources and a painless economic development on the basis of unrestricted, smooth and rapid development of productive forces.

"The abolition of private property and the disappearance of classes will do away with the exploitation of man by man. Work will cease to be toiling for the benefit of a class enemy: instead of being merely a means of livelihood it will become a necessity of life: want and economic inequality, the misery of enslaved classes, and a wretched standard of life generally will disappear; the hierarchy created in the division of labour system will be abolished together with the antagonism between mental and manual labour; and the last vestige of the social inequality of the sexes will be removed. At the same time, the organs of class domination, and the State in the first place, will disappear also. The State, being the embodiment of class domination, will die out in so far as classes die out, and with it all measures of corecion will expire.

...."In Communist society no social restrictions will be imposed upon the growth of the forces of production. Private ownership in the means of production, the selfish lust for profits, the artificial retention of the masses in a state of ignorance, poverty--which retards technical progress in capitalist society--and unproductive expenditures will have no place in a Communist society. The most expedient utilisation of the forces of nature and of the natural conditions or production in the various parts of the world, the removal of the antagonism between town and country, that under capitalism results from the low technical level of agriculture and its systematic lagging behind industry; the closest possible co-operation between science and technique, the utmost encouragement of research work and the practical application of its results on the widest possible social scale; planned organisation of scientific work; the application of the most perfect methods of statistical accounting and planned regulation of economy; the rapid growth of social needs, which is the most powerful internal driving force of the whole system--all these will secure the maximum productivity of social labour, which in turn will release human energy for the powerful development of science and art...."

Reading No-5

This reading is excerpted from "Free Private Enterprise," by Sumner H. Slichter, in Readings in Economic Doctrines, the economy and its problems, vol. 2, by Howard L. Balsley, Littlefield, Adams & Co., Paterson, New Jersey, 1961. pp. 97-101.

"SOME CLAIMS ON BEHALF OF FREE ENTERPRISE"

"Since free enterprise is the principal method by which our economic activities are organized and controlled, our study of modern industrial society must very largely consist of an inquiry into how freedom works under present-day conditions--such as machine industry, huge corporations, and science applied to business. But before we proceed further with our analysis, it will be helpful to become familiar in a general way with some of the claims which have been made in behalf of free enterprise. The 'obvious and simple system of natural liberty,' as Adam Smith called freedom of enterprise, has been regarded as the one and only way in which men might attain the maximum satisfaction of their desires with a minimum outlay of sacrifice. It is true that this extreme view has been accepted by few economists of repute and that since the middle of the last century it has been increasingly under attack. Nevertheless it has had and still does have wide acceptance by the general public and by certain schools of politicians, and it is appealed to frequently in political controversies. And even though we no longer spend much time discussing whether or not we can always trust free enterprise to regulate economic activity better than any other method, we are frequently compelled to decide whether or not it is the best way of controlling a specific economic activity under specific circumstances. Consequently the claims which have been made on its behalf are still very live issues.

"The reasoning in support of the belief that freedom of enterprise results in the maximum of satisfaction at the minimum of cost is very simple. Each individual, it is said, is better able than any one else to judge his own interests. If men are at liberty to spend their money as they choose, they will naturally purchase those things that will yield them the most satisfaction. Consequently the very commodities which give consumers the greatest pleasure are the most profitable for business enterprises to produce. Likewise, if men are free to use such methods of production as they wish, they will select those which involve the least cost per unit of output. With the goods which give the greatest gratification being made by the methods which are least costly, it follows, according to the theory, that there will be the maximum surplus of satisfaction over sacrifice.

...."But how is it possible for us to trust business enterprises with so much freedom? In other branches of human relations, laws to regulate conduct seem to be quite essential. Why should industry be an exception to this general rule? If we leave business concerns free to make anything they like by any methods which they see fit, what is to prevent them from supplying the public with poorly made or adulterated goods or from using methods that are cheap in terms of dollars but expensive in terms of human sacrifice? Might not the sum total of pleasure be greater and of pain be less if the state enforced certain standards of quality or prohibited the use of certain methods of production?

"The theory of free enterprise does not, it is important to emphasize, assert that restraints upon human selfishness are not needed. It simply assumes that they are provided by competition. This, according to the theory, is the great regulative force which establishes effective control over economic activities and gives each of us an incentive to observe the interests of others. Thus business establishments are deterred from furnishing adulterated or poorly made goods by the fear that customers may shift their patronage to rivals. Likewise the enterprises which fail to protect their men against accidents or industrial disease or which work them unusually hard, are penalized by the refusal of laborers to work for them except at a higher wage than other employers pay.

"The mere existence of competition, however, is not enough. For it to perform satisfactorily the protective function attributed to it, certain very definite condtions must be present.

"To begin with, an appreciable proportion of buyers and sellers must be willing to discriminate against those sellers or buyers who ignore, and in favor of those who take account of, the welfare of others. Otherwise, of course, no one has an economic incentive to pay attention to the wellbeing of his fellows. Assume, for example, that an enterprise pollutes a stream by dumping refuse and chemicals into it. From the standpoint of the firm, this may be an economical method of production. But from the standpoint of the community it is an expensive one, because it kills the fish, spoils the stream for bathing, and makes it foul and ill-smelling. But competition will not stop the pollution unless an appreciable number of consumer, wage earners, or investors refuse to deal with the firm which is responsible--that is, unless a substantial number of consumers refuse to buy from it, or wage earners to work for it, or investors to put money into it. But if the enterprise charges no more than its rivals for goods of equal grade, offers equally attractive conditions of employment, and pays as high dividends, who has an interest in discriminating against it? Perhaps the very fact that the enterprise pollutes the stream enables it to offer better terms than its rivals. Or take the case of child labor--another method of production cheap in dollars and cents but expensive in terms of human cost. If the firms which employ children are able, because of that very fact, to sell for less or to pay higher wages to adults or higher profits to investors, who is going to discriminate against them? Under these circumstances, does not competition positively encourage the employment of children?

"But willingness to discriminate between those who consider the interests of others and those who do not is insufficient. Competition protects consumers against inferior ware only when they know good quality from bad; it protects laborers from unguarded machines only when they know which employers have and which have not guarded their machines. In other words, competition is an efficient protective agency only when buyers or sellers have the information necessary to make intelligent choices. It fails, for example, to protect consumers against milk from tubercular cattle because the ordinary buyer of milk has no way of distinguishing the milk of healthy cows from that of diseased.

"The information needed for intelligent choices may be available, and yet many buyers or sellers may be too ignorant, too careless, too neglectful of their own interests to use it. If, for example, workmen show no disposition to shun plants which are notoriously dangerous or unsanitary, what incentive have employers to improve conditions?

"Discrimination can have an effect only when those who are its objects realize that it is being practiced. For years, wage earners, by quitting and seeking work elsewhere, have discriminated against employers who gave poor treatment. But all of this produced little effect upon working conditions and labor policies because employers were not aware how many men were quitting. As soon, however, as enterprises began to keep track of the number of resignations, great improvements occurred in the treatment of labor.

"Finally, competition works well as a protective force only when there is not great disparity in bargaining power between buyers and sellers. If workmen are so numerous and jobs so scarce that competition among laborers for jobs is more intense than competition among employers for men, conditions of employment are bound to be unsatisfactory. Likewise in boom times, when goods are scarce and deliveries are slow, competition fails to protect consumers against poor ware. In the clothing industry, for example, it is notorious that in busy years the quality of garments goes down."

UNIT I
LESSON 6 - Reading No. 7

from:
KARL MARX, A CONTRIBUTION TO THE CRITIQUE OF POLITICAL ECONOMY

Introduction - In the Preface of this work (1859) Marx sketched an outline of his theory of history. According to Marx, economic changes are the basic causes of social, political, and cultural changes because man's economic role is his most important social role. Changes in man's economic role therefore lead him to change his political system, culture, indeed, his entire society. Marx distinguishes types of societies by the kind of economic system that predominates in a particular society. He explains why societies normally go through certain stages of development - in general, the traditional, feudal, capitalist, and socialist stages. His main purpose is to demonstrate how and why the present capitalistic organization of society must collapse from the strain of its internal conflicts.

> "In the social production which men carry on they enter into definite relations that are indispensible and independent of their will....these relations of production correspond to a definite stage of development of their material powers of production. The sum total of these relations of production constitutes the economic structure of society.

Editor - Marx introduces his basic concepts:

I. "Social production" - Marx defines "social production" as an economic system in which groups of people produce goods and services making use of specialized resources and the division of labor. Because of specialized production, people work for each other. For example, automobile workers "work for" garment workers who buy automobiles and garment workers "work for" automobile workers who buy clothing.

II. "Material powers of production" - Marx uses this expression interchangeably with the phrases "modes of production" and "forces of production".

He defines "material powers" as society's stock of productive wealth. What is called real capital in this course.

III. "Relations of production" - Marx defines "relation of production" as the social relationships that people have with one another in their economic role as producers. As we have seen in Lesson Two, because of specialization we all have "relations of production" with people we have never seen or even know about. "Definite relations" means that with the present stock of capital a definite number of hours is required to produce an automobile, a shirt, or a given quantity of any commodity.

IV. "Economic structure" - Marx defines "economic structure" as all of society's "relations of production" put together. Thus, Marx defines economic structure as the relations between individuals, although economic structure or economic system is conventionally defined as a system of social organizations.

The meaning of Marx's paragraph should now be clear. In brief, Marx claims that modes of production determine relations of production - that is, one man will work for another in accordance with how many tools he has to work with, how good these tools are, how skilled or well-trained he is, and, finally, who owns or controls the tools.

> "...the economic structure of society (is) the real foundation on which rise legal and political superstructures and to which corresponds definite forms of social consciousness. The mode of production in material life determines the general character of the social, political and spiritual processes of life. It is not the consciousness of men that determines their existence, but, on the contrary, their social existence determines their consciousness."

Editor - According to Marx, the economic structure of a society is like the foundation of a house and the "superstructures" are like the frame and roof of a house. The mode of production determines the relations of production (that is, the economic structure) which in turn determines the laws that govern private property, the use of the police power of the government, and so on. "Definite forms of social consciousness" means the ideas that we hold about the nature of society, the virtues and drawbacks of society, and the ideas we have about our own and other people's place in society.

Let us illustrate the relationship between economic structure and superstructures, from Marx's point-of-view, with the capitalist mode of production. In capitalist societies - that is societies based on machine production, specialization, and the division of labor - there are two broad social classes, capitalists (those who own the factories, farms, and other productive tools) and workers (those who do not own society's productive tools). The basic relation of production is exploitive - that is, workers "work for" capitalists because they have no tools to work with for themselves, but capitalists do not "work for" workers because they monopolize society's tools and are able to live due to the fact that workers are "working for" them.

In capitalist societies the purpose of the government (a part of the superstructure) is to protect property and preserve order, in particular, to protect the property of the capitalists and to preserve order among the workers. Consciousness in capitalist society depends on "social existence." Poor workers will have one idea of the strengths and weaknesses of capitalism and rich businessmen will have quite another. For example, poor workers frequently believe that minimum wage laws are "just" or "fair" and businessmen often believe that such laws are "unfair" and burdensome." Poor workers believe minimum wage laws are fair because they are poor. If businessmen believe that they are unfair it is because minimum wages increase business costs and reduce profits. Thus an individual's opinion is determined by his material position in society.

Marx implies in this passage "social existence determines consciousness" that men cannot change their existence - that is, their style of life, income, social relations, and so on - *merely* by changing their ideas. In capitalist societies, workers cannot put an end to their exploitations by capitalists merely by becoming aware of the fact that they are exploited.

> "At a certain stage of their development, the material forces of production in society come into conflict with the existing relations of production, or what is but a legal expression of the same thing - with the property relations within which they had been at work before."

Editor - In this sentence, Marx lays the basis for his theory of social change and revolution. "Comes into conflict with" means that economic, social, and political problems arise when there exists side by side productive wealth and technology suitable in one kind of society, and relations of production suitable in another kind of society.

In capitalist societies, the basic conflict between the modes and relations of production is the *private* ownership of capital and productive wealth and the *social* character of production (for example, assembly line production, cooperation, coordination between individuals and groups in the production process, etc.) For example, workers frequently want to determine work rules on the job collectively but capitalists generally would prefer to establish work rules independently because they want to control costs, work processes, etc. There is thus a never-ending source of conflict between the two groups or classes.

> "From forms of development of the forces of production these relations turn into fetters. Then comes the period of social revolution."

Editor - Marx means that at one stage in history relations of production are determined by forces or modes of production, and that at a later stage in history the same *relations of production* hold back the further development of the *forces of production* (capital accumulation and new kinds of specialization). How would this apply to capitalist societies? In one of his other works Marx argued that private ownership of productive wealth created economically and socially progressive (beneficial) relations of production in the early stages of capitalist development in Europe and the United States. But in later stages of private ownership and capitalist-worker relations lead to economic crises, depression, and stagnation, social disorder and disruption, and political instability and repression. Sooner or later, he asserted, the workers will replace the capitalists as the leading or ruling group in society-that is, there will be a social revolution.

> "With the change of the economic foundation the entire immense superstructure is more or less rapidly transformed. In considering such transformations the distinction should always be made between the material transformation of the economic conditions of production which can be determined with the precision of natural science, and the legal, political, religious, aesthetic or philosophic - in short ideological forms of which men become conscious of this conflict and fight it out."

Editor - Marx means that the kind of government formed by the older, now economically-defunct, ruling groups - and also their ideas, their religious conventions, and their culture - are all changed. In their place, the new, rising, progressive groups erect another "superstructure." According to him, economic, social, and political conflict is basically determined by the conflict between forces and relations of production. He infers, however, that non-economic conflicts also have their own reason-for-being, that is, their own independent life. The "Materialistic" theory of history and social change therefore cannot explain the origins, development, and resolution of every social conflict. We cannot predict the outcome of such conflicts with the precision of natural science.

In the United States, capitalist society conflicts between workers and capitalists, Negroes and whites, Republicans and Democrats, and so on arise in the last analysis out of the conflicts between forces and relations of production. But other forces represent, and shape these conflicts - for example, personality clashes, racism, irrational fears, etc.

> "Just as our opinion of an individual is not based on what he thinks of himself, so can we not judge such a period of transformation by its own consciousness; on the contrary, this consciousness must rather by explained from the contradictions of material life, from the existing conflict between the social forces of production and the relations of production."

Editor - Marx says that we can not understand a period of rapid social change by what the people involved thought (or think) about it, just as we do not judge the star football player by his own (frequently inflated) conception of himself. Marx would probably argue today, for example, that Negro-white conflicts appear to the participants to arise out of "racial" factors, although in the last analysis they arise out of the inability or unwillingness of the dominant groups within our society to make Negroes full-fledged members of the working class. He would probably also say that Negroes would be faced with different problems as full-fledged members of the working class, thus causing new conflicts to arise.

> "No social order ever disappears before all the productive forces, for which there is room in it, have been developed; and new higher relations of production never appear before the material conditions of their existence have matured in the womb of the old society."

Editor - Marx means that social conflict does not reach the point at which the existing social order is overthrown until production methods and technology reach the limit of their development. Marx believed that capitalism would survive as long as it remained economically-progressive and experienced economic expansion. He also believed that "higher relations of production" - that is, individuals working for each other out of their own free will rather than out of economic necessity - are possible due to the tremendous technological advances (that is, high labor productivity) that capitalism brings about.

> "Therefore, mankind always takes up only such problems as it can solve; since, looking at the matter more closely, we will always find that the problem itself arises only when the material conditions necessary for its solution already exist or are at least in the process of formation."

Editor - This is a good statement of Marx's method for studying and understanding social conflict and social change. He says that society does not perceive that it has "problems" until technology and production methods have advanced to the state where the problems can be solved. To apply this method to our capitalist society, poverty did not become a "problem" - that is, there was little debate about the ways of eliminating poverty, there was no "War on Poverty," and so on - until we became prosperous enough to be able to solve it. According to Marx, "the material conditions necessary for its solution already exist."

> "In broad outlines we can designate the Asiatic, the ancient, the feudal, and the modern bourgeois methods of production as so many epochs in the progress of the economic formation of society. The bourgeois relations of production are the last antogonistic form of the social process of production - antagonistic not in the sense of individual antagonism, but of one arising from conditions surrounding the life of individuals in society; at the same time the productive forces developing within the womb of bourgeois society create the material conditions for the solution of that antagonism. This social formation constitutes, therefore, the closing chapter of the prehistoric stage of human history."

Editor - We have illustrated Marx's theories by examples drawn from capitalist societies. Marx meant his theories to generally apply to all societies

The "Asiatic" method of production consists of a "self-sustaining unity of manufacture and agriculture" within a village commune, often together wit a highly centralized government because of the need for large-scale public works and irrigation systems. The best examples are ancient India and China

The "ancient" method of production is characterized by urbanization and chattel-slavery as the main form of poverty. The best examples are the city states of ancient Greece.

The "feudal" mode of production takes many forms, and in general is typified by a self-sustaining agricultural economy, a specialized urban manufacturing economy based on handicraft methods, and the dual existence of nobility and serfs in the countryside and "free" merchants and handicraftsmen in the towns and cities. The best example is Medieval Europe.

The "bourgeois" method of production is the method that prevails in our own society, Western Europe, and many other regions in the world. ("bourgeois" comes from the word burgher, or city-dweller, who was a merchant or a small manufacturer). As we have seen, "bourgeois" relations of production are antagonistic - that is, generate continuous social conflicts - because workers do not own their own productive tools and therefore are compelled to sell their labor for wages to capitalists who do own society's productive tools. Hence the workers "work for" the capitalists but the capitalists do not have to "work for" the workers. In Marx's thinking the capitalists thus exploit the workers. Marx claims that sooner or later the workers will become conscious of their exploitation, organize themselves politically, overthrow the capitalists, and establish a new economic structure and superstructure. This new society is called socialist. Marx did not consider this stage to be "pre-historic" because he expected that social antagonisms and conflicts that arose within socialism are capable of solution without further social revolution.

For Marx, the essence of socialism is that workers work for each other out of a sense of social duty, affection, and finally, love. According to Marx, compulsion is not necessary to get people to work because people are working only for each other - that is, exploitation is abolished. Marx does not spell out the details of the organization and functioning of socialism, but he once expressed his views on the meaning of the phrase "working for each other" or "sharing each other's products" in a letter to his co-worker, Fredrick Engels.[1] As you can see, in this passage, Marx, in effect, defines love or human relations in a truly free, human society:

---

[1] Irving Fetscher, "Markist Concretization of the Concept of Freedom" in Eric Fromm (ed), Socialist Humanism: An International Symposium. N.Y.,

"Granted, we have produced as people: in his production each of us has *twice affirmed* himself and the other. 1) In production I found my individuality, and my particularity materialized, and therefore, in the course of my activity I enjoyed a personal expression of life as well as a sense of the individual joy in the contemplation of my personality as objective, sensually perceptible and indubitable power. 2) *In your satisfaction*, or your use of my products, I had immediate *satisfaction as well as consciousness that my* work satisfied a human need. Therefore I, as an *objective human being*, have produced an object corresponding to another human being's need. 3) I became, *for you, the mediator between you and the species*, thus I became a necessary, self-conscious, and sentient part of your fulfillment of your essence. *Thus, I knew I was affirmed in your thought as well as in your love*. 4) In my individual expression of life I directly created your expression of life. Thus, my true essence, my *actualized species-essence*, was confirmed in *my immediate individual activity*. Our productions were so many mirrors reflecting our being."

LESSON 7 READINGS

Reading 1

The following reading is taken from Essays in Persuasion, by John Maynard Keynes, written in the decade following World War I. The preface to the paperback edition aptly introduces Lord Keynes, perhaps the greatest economist of the Twentieth century: "One of the creators of the modern world, John Maynard Keynes was born in Cambridge (England) in 1883 and died in 1946."

You will read more of and about Keynes in succeeding parts of the course; but here, as a conclusion to your study about the nature and significance of economics, it seems appropriate to read Lord Leynes' predictions about economic progress in the Twentieth century.

(excerpted from John Maynard Keynes, Essays in Persuasion, The Norton Library, W. W. Norton & Company, Inc. New York, pp. 358 - 373.) (1963 edition)

"ECONOMIC POSSIBILITIES FOR OUR GRANDCHILDREN (1930)"

"We are suffering just now from a bad attack of economic pessimism. It is common to hear people say that the epoch of enormous economic progress which characterised the nineteenth century is over; that the rapid improvement in the standard of life is now going to slow down--at any rate in Great Britain; that a decline in prosperity is more likely than an improvement in the decade which lies ahead of us.

"I believe that this is a wildly mistaken interpretation of what is happening to us. We are suffering, not from the rheumatics of old age, but from the growing-pains of over-rapid changes, from the painfulness of readjustment between one economic period and another. The increase of technical efficiency has been taking place faster than we can deal with the problem of labour absorption; the improvement in the standard of life has been a little too quick;...And even so, the waste and confusion which ensue relate to not more than 7½ per cent of the national income....

"The prevailing world depression, the enormous anomaly of unemployment in a world full of wants, the disastrous mistakes we have made, blind us to what is going on under the surface--to the true interpretation of the trend of things. For I predict that both of the two opposed errors of pessimism which now make so much noise in the world will be proved wrong in our own time--the pessimism of the revolutionaries who think that things are so bad that nothing can save us but violent change, and the pessimism of the reactionaries who consider the balance of our economic and social life so precarious that we must risk no experiments.

"My purpose in this essay, however, is not to examine the present or the near future, but to disembarrass myself of short views and take wings into the future. What can we reasonably expect the level of our economic life to be a hundred years hence? What are the economic possibilities for our grandchildren?

"From the earliest times of which we have record--back, say, to two thousand years before Christ--down to the beginning of the eighteenth century, there was no very great change in the standard of life of the average man living in the civilised centres of the earth. Ups and downs certainly. Visitations of plague, famine, and war. Golden intervals. But no progressive, violent change. Some periods perhaps 50 per cent better than others--at the utmost 100 per cent better--in the four thousand years which ended (say) in A.D. 1700.

"This slow rate of progress, or lack of progress, was due to two reasons--to the remarkable absence of important technical improvements and to the failure of capital to accumulate.

"The absence of important technical inventions between the prehistoric age and comparatively modern times is truly remarkable. Almost everything which really matters and which the world possessed at the commencement of the modern age was already known to man at the dawn of history. Language, fire, the same domestic animals which we have to-day, wheat,barley, the vine and the olive, the plough, the wheel, the oar, the sail, leather, linen and cloth, bricks and pots, gold and silver, copper, tin, and lead--and iron was added to the list before 1000 B.C.--banking, statecraft, mathematics, astronomy, and religion. There is no record of when we first possessed these things.

"At some epoch before the dawn of history--perhaps even in one of the comfortable intervals before the last ice age--there must have been an era of progress and invention comparable to that in which we live to-day. But through the greater part of recorded history there was nothing of the kind.

"The modern age opened, I think, with the accumulation of capital which began in the sixteenth century. I believe--for reasons with which I must not encumber the present argument--that this was initially due to the rise of prices, and the profits to which that led, which resulted from the treasure of gold and silver which Spain brought from the New World into the Old. From that time until to-day the power of accumulation by compound interest, which seems to have been sleeping for many generations, was re-born and renewed its strength. And the power of compound interest over two hundred years is such as to stagger the imagination.

"Let me give in illustration of this a sum which I have worked out. The value of Great Britain's foreign investments to-day is estimated at about 4,000,000,000 /Pounds/. This yields us an income at the rate of about 6½ per cent. Half of this we bring home and enjoy; the other half, namely, 3¼ per cent, we leave to accumulate abroad at compound interest. Something of this sort has now been going on for about 250 years.

"For I trace the beginnings of British foreign investment to the treasure which Drake stole from Spain in 1580. In that year he returned to England bringing with him the prodigious spoils of the Golden Hind. Queen Elizabeth was a considerable shareholder in the syndicate which had financed the expedition. Out of her share she paid off the whole of England's foreign debt, balanced her Budget, and found herself with about 40,000 /Pounds/ in hand. This she invested in the Levant Company--which prospered. Out of the profits of the Levant Company, the East India Company was founded; and the profits of this great enterprise were the foundation of England's subsequent foreign investment. Now it happens that 40,000 /Pounds/accumulating at 3¼ per cent compound interest approximately corresponds to the actual volume of England's foreign investments at various dates, and would actually amount to-day to the total of 4,000,000,000 /Pounds/ which I have already quoted as being what our foreign investments now are. Thus, every 1 /Pound/which Drake brought home in 1580 has now become 100,000 /Pounds/. Such is the power of compound interest.

"From the sixteenth century, with a cumulative crescendo after the eighteenth, the great age of science and technical inventions began, which since the beginning of the nineteenth century has been in full flood--coal, steam electricity, petrol, steel, rubber, cotton, the chemical industries, automatic machinery and the methods of mass production, wireless, printing, Newton, Darwin, and Einstein, and thousands of other things and men too famous and familiar to catalogue.

"What is the result? In spite of an enormous growth in the population of the world, which it has been necessary to equip with houses and machines, the average standard of life in Europe and the United States has been raised, I think, about fourfold. The growth of capital has been on a scale which is far beyond a hundred-fold of what any previous age had known. And from now on we need not expect so great an increase of population.

"If capital increases, say, 2 per cent per annum, the capital equipment of the world will have increased by a half in twenty years, and seven and a half times in a hundred years. Think of this in terms of material things--houses, transport, and the like.

"....Let us, for the sake of argument, suppose that a hundred years hence we are all of us, on the average, eight times better off in the economic sense than we are to-day. Assuredly there need be nothing here to surprise us.

"Now it is true that the needs of human beings may seem to be insatiable. But they fall into two classes--those needs which are absolute in the sense that we feel them whatever the situation of our fellow human beings may be, and those which are relative in the sense that we feel them only if their satisfaction lifts us above, makes us feel superior to, our fellows. Needs of the second class, those which satisfy the desire for superiority, may indeed by insatiable; for the higher the general level, the higher still are they. But this is not so true of the absolute needs--a point may soon be reached, much sooner perhaps than we are all of us aware of, when these needs are satisfied in the sense that we prefer to devote our further energies to non-economic purposes.

"Now for my conclusion, which you will find, I think, to become more and more startling to the imagination the longer you think about it.

"I draw the conclusion that, assuming no important wars and no important increase in population, the *economic problem* may be solved, or be at least within sight of solution, within a hundred years. This means that the economic problem is not--if we look into the future--*the permanent problem of the human race*.

"Why, you may ask, is this so startling? It is startling because--if, instead of looking into the future, we look into the past--we find that the economic problem, the struggle for subsistence, always has been hitherto the primary, most pressing problem of the human race--not only of the human race, but of the whole of the biological kingdom from the beginnings of life in its most primitive forms.

"Thus we have been expressly evolved by nature--with all our impulses and deepest instincts--for the purpose of solving the economic problem. If the economic problem is solved, mankind will be deprived of its traditional purpose.

"Will this be a benefit? If one believes at all in the real values of life, the prospect at least opens up the possibility of benefit. Yet I think with dread of the readjustment of the habits and instincts of the ordinary man, bred into him for countless generations, which he may be asked to discard within a few decades.

"To use the language of to-day--must we not expect a general "nervous breakdown"? We already have a little experience of what I mean--a nervous breakdown of the sort which is already common enough in England and the United States amongst the wives of the well-to-do classes, unfortunate women, many of them, who have been deprived by their wealth of their traditional tasks and occupations--who cannot find it sufficiently amusing, when deprived of the spur of economic necessity, to cook and clean and mend, yet are quite unable to find anything more amusing.

"To those who sweat for their daily bread leisure is a longed-for sweet--until they get it.

"There is the traditional epitaph written for herself by the old charwoman:

Don't mourn for me, friends, don't weep for me never,
For I'm going to do nothing for ever and ever.

This was her heaven. Like others who look forward to leisure, she conceived how nice it would be to spend her time listening-in--for there was another couplet which occurred in her poem:--

With psalms and sweet music the heavens'll be ringing,
But I shall have nothing to do with the singing.

Yet it will only be for those who have to do with the singing that life will be tolerable--and how few of us can sing!

"Thus for the first time since his creation man will be faced with his real, his permanent problem--how to use his freedom from pressing economic cares, how to occupy the leisure, which science and compound interest will have won for him, to live wisely and agreeably and well.

"....I feel sure that with a little more experience we shall use the new-found bounty of nature quite differently from the way in which the rich use it to-day, and will map out for ourselves a plan of life quite otherwise than theirs.

"For many ages to come the old Adam will be so strong in us that everybody will need to do some work if he is to be contented. We shall do more things for ourselves than is usual with the rich to-day, only too glad to have small duties and tasks and routines. But beyond this, we shall endeavour to spread the bread thin on the butter--to make what work there is still to be done to be as widely shared as possible. Three-hour shifts or a fifteen-hour week may put off the problem for a great while. For three hours a day is quite enough to satisfy the old Adam in most of us!

"....I see us free, therefore, to return to some of the most sure and certain principles of religion and traditional virtue--that avarice is a vice, that the exaction of usury is a misdemeanour, and the love of money is detestable, that those walk most truly in the paths of virtue and sane wisdom who take least thought for the morrow. We shall once more value ends above means and prefer the good to the useful. We shall honour those who can teach us how to pluck the hour and the day virtuously and well, the delightful people who are capable of taking direct enjoyment in things, the lilies of the field who toil not, neither do they spin.

"But beware! The time for all this is not yet. For at least another hundred years we must pretend to ourselves and to every one that fair is foul and foul is fair; for foul is useful and fair is not. Avarice and usury and precaution must be our gods for a little longer still. For only they can lead us out of the tunnel of economic necessity into daylight.

"I look forward, therefore, in days not so very remote, to the greatest change which has ever occurred in the material environment of life for human beings in the aggregate. But, of course, it will all happen gradually, not as a catastrophe. Indeed, it has already begun. The course of affairs will simply be that there will be ever larger and larger classes and groups of people from whom problems of economic necessity have been practically removed. The critical difference will be realised when this condition has become so general that the nature of one's duty to one's neighbor is changed. For it will remain reasonable to be economically purposive for others after it has ceased to be reasonable for oneself.

"The pace at which we can reach our destination of economic bliss will be governed by four things--our power to control population, our determination to avoid wars and civil dissensions, our willingness to entrust to science the direction of those matters which are properly the concern of science, and the rate of accumulation as fixed by the margin between our production and our consumption; of which the last will easily look after itself, given the first three.

"Meanwhile there will be no harm in making mild preparations for our destiny, in encouraging, and experimenting in, the arts of life as well as the activities of purpose.

"But, chiefly, do not let us overestimate the importance of the economic problem, or sacrifice to its supposed necessities other matters of greater and more permanent significance. It should be a matter for specialists--like dentistry. If economists could manage to get themselves thought of as humble, competent people, on a level with dentists, that would be splendid!"

The concluding reading is taken from Chapter 1 of Michael Harrington's influential book, The Other America, The Macmillan Company, 1962, a book which was published just before the creation of the "Poverty Program" of the Federal Government. It is included as a companion-piece to the optimistic long-run predictions of Lord Keynes to dramatize the reality of the 'Economic Problem' as it exists today in American Society.

Reading 2

Excerpted from Chapter 1, of The Other America, by Michael Harrington (1962).

"THE INVISIBLE LAND"

"There is a familiar America. It is celebrated in speeches and advertised on television and in the magazines. It has the highest mass standard of living the world has ever known.

"In the 1950's this America worried about itself, yet even its anxieties were products of abundance. The title of a brilliant book was widely misinterpreted, and the familiar America began to call itself "the affluent society." There was introspection about Madison Avenue and tail fins; there was discussion of the emotional suffering taking place in the suburbs. In all this, there was an implicit assumption that the basic grinding economic problems had been solved in the United States. In this theory the nation's problems were no longer a matter of basic human needs, of food, shelter, and clothing. Now they were seen as qualitative, a question of learning to live decently amid luxury.

"While this discussion was carried on, there existed another America. In it dwelt somewhere between 40,000,000 and 50,000,000 citizens of this land. They were poor. They still are.

...."Here are the unskilled workers, the migrant farm workers, the aged, the minorities, and all the others who live in the economic underworld of American life..../the/fact is unmistakable, whatever its exact dimensions, and the truly human reaction can only be outrage. As. W. H. Auden wrote:

Hunger allows no choice
To the citizen or the police;
We must love one another or die.

..."The millions who are poor in the United States tend to become increasingly invisible. Here is a great mass of people, yet it takes an effort of the intellect and will even to see them.

...."There are perennial reasons that make the other America an invisible land.

"Poverty is often off the beaten track. It always has been. The ordinary tourist never left the main highway, and today he rides interstate turnpikes. He does not see the company houses in rows, the rutted roads (the poor always have had bad roads whether they live in the city, in towns, or on farms), and everything is black and dirty. And even if he were to pass through such a place by accident, the tourist would not meet the unemployed men in the bar or the women coming home from a runaway sweatshop.

"Then, too, beauty and myths are perennial masks of poverty. The traveler comes to the Appalachians in the lovely season. He sees the hills, the streams, the foliage--but not the poor. Or perhaps he looks at a run-down mountain house and, remembering Rousseau rather than seeing with his eyes, decides that "those people" are truly fortunate to be living the way they are and that they are lucky to be exempt from the strains and tensions of the middle class. The only problem is that "those people," the quaint inhabitants of those hills, are undereducated, underprivileged, lack medical care, and are in the process of being forced from the land into a life in the cities, where they are misfits.

...."Now the American city has been transformed. The poor still inhabit the miserable housing in the central area, but they are increasingly isolated from contact with, or sight of, anybody else. Middle-class women coming in from Suburbia on a rare trip may catch the merest glimpse of the other America on the way to an evening at the theater, but their children are segregated in suburban schools. The business or professional man may drive along the fringes of slums in a car or bus, but it is not an important experience to him. The failures, the unskilled, the disabled, the aged, and the minorities are right there, across the tracks, where they have always been. But hardly anyone else is.

"In short, the very development of the American city has removed poverty from the living, emotional experience of millions upon millions of middle-class Americans. Living out in the suburbs, it is easy to assume that ours is, indeed, an affluent society.

"This new segregation of poverty is compounded by a well-meaning ignorance. A good many concerned and sympathetic Americans are aware that there is much discussion of urban renewal. Suddenly, driving through the city, they notice that a familiar slum has been torn down and that there are towering, modern buildings where once there had been tenements or hovels. There is a warm feeling of satisfaction, of pride in the way things are working out: the poor, it is obvious, are being taken care of.

"The irony in this...is that the truth is nearly the exact opposite to the impression. The total impact of the various housing programs in postwar America has been to squeeze more and more people into existing slums. More often than not, the modern apartment in a towering building rents at $40 a room or more. For, during the past decade and a half, there has been more subsidization of middle-and upper-income housing than there has been of housing for the poor.

"Clothes makes the poor invisible too: America has the best-dressed poverty the world has ever known. For a variety of reasons, the benefits of mass production have been spread much more evenly in this area than in many others. It is much easier in the United States to be decently dressed than it is to be decently housed, fed, or doctored. Even people with terribly depressed incomes can look prosperous.

"This is an extremely important factor in defining our emotional and existential ignorance of poverty. In Detroit the existence of social classes became much more difficult to discern the day the companies put lockers in the plants. From that moment on, one did not see men in work clothes on the way to the factory, but citizens in slacks and white shirts. This process has been magnified with the poor throughout the country. There are tens of thousands of Americans in the big cities who are wearing shoes, perhaps even a stylishly cut suit or dress, and yet are hungry. It is not a matter of planning, though it almost seems as if the affluent society had given out costumes to the poor so that they would not offend the rest of society with the sight of rags.

"Then, many of the poor are the wrong age to be seen. A good number of them (over 8,000,000) are sixty-five years of age or better; an even larger number are under eighteen. The aged members of the other America are often sick, and they cannot move. Another group of them live out their lives in loneliness and frustration: they sit in rented rooms, or else they stay close to a house in a neighborhood that has completely changed from the old days. Indeed, one of the worst aspects of poverty among the aged is that these people are out of sight and out of mind, and alone.

"The young are somewhat more visible, yet they too stay close to their neighborhoods. Sometimes they advertise their poverty through a lurid tabloid story about a gang killing. But generally they do not disturb the quiet streets of the middle class.

"And finally, the poor are politically invisible. It is one of the cruelest ironies of social life in advanced countries that the dispossessed at the bottom of society are unable to speak for themselves. The people of the other America do not, by far and large, belong to unions, to fraternal organizations, or to political parties. They are without lobbies of their own; they put forward no legislative program. As a group, they are atomized. They have no face; they have no voice.

"Thus, there is not even a cynical political motive for caring about the poor, as in the old days. Because the slums are no longer centers of powerful political organizations, the politicians need not really care about their inhabitants. The slums are no longer visible to the middle class, so much of the idealistic urge to fight for those who need help is gone. Only the social agencies have a really direct involvement with the other America, and they are without any great political power.

"Forty to 50,000,000 people are becoming increasingly invisible. That is a shocking fact. But there is a second basic irony of poverty that is equally important: if one is to make the mistake of being born poor, he should choose a time when the majority of the people are miserable too.

"J. K. Galbraith develops this idea in The Affluent Society, and in doing so defines the "newness" of the kind of poverty in contemporary America. The old poverty, Galbraith notes, was general. It was the condition of life of an entire society, or at least of that huge majority who were without special skills or the luck of birth. When the entire economy advanced, a good many of these people gained higher standards of living. Unlike the poor today, the majority of poor of a generation ago were an immediate (if cynical) concern of political leaders. The old slums of the immigrants had the votes; they provided the basis for labor organizations; their very numbers could be a powerful force in political conflict. At the same time the new technology required higher skills, more education, and stimulated an upward movement for millions.

"Perhaps the most dramatic case of the power of the majority poor took place in the 1930's. The Congress of Industrial Organizations literally organized millions in a matter of years. A labor movement that had been declining and confined to a thin stratum of the highly skilled suddenly embraced masses of men and women in basic industry. At the same time this acted as a pressure upon the Government, and the New Deal codified some of the social gains in laws like the Wagner Act. The result was not a basic transformation of the American system, but it did transform the lives of an entire section of the population.

"Todays poor...missed the political and social gains of the thirties. They are, as Galbraith rightly points out, the first minority poor in history, the first poor not to be seen, the first poor whom the politicians could leave alone.

"The first step toward the new poverty was taken when millions of people proved immune to progress. When that happened, the failure was not individual and personal, but a social product. But once the historic accident takes place, it begins to become a personal fate.

"The new poor of the other America saw the rest of society move ahead. They went on living in depressed areas, and often they tended to become depressed human beings. In some of the West Virginia towns, for instance, an entire community will become shabby and defeated. The young and the adventurous go to the city, leaving behind those who cannot move and those who lack the will to do so. The entire area becomes permeated with failure, and that is one more reason the big corporations shy away.

"There are mighty historical and economic forces that keep the poor down; and there are human beings who help out in this grim business, many of them unwittingly. There are sociological and political reasons why poverty is not seen; and there are misconceptions and prejudices that literally blind the eyes. The latter must be understood if anyone is to make the necessary act of intellect and will so that the poor can be noticed.

"Here is the most familiar version of social blindness: 'The poor are that way because they are afraid of work. And anyway they all have big cars. If they were like me (or my father or my grandfather), they could pay their own way. But they prefer to live on the dole and cheat the taxpayers.'

"This theory, usually thought of as a virtuous and moral statement, is one of the means of making it impossible for the poor ever to pay their way. There are, one must assume, citizens of the other America who choose impoverishment out of fear of work (though, writing it down, I really do not believe it). But the real explanation of why the poor are where they are is that they made the mistake of being born to the wrong parents, in the wrong section of the country, in the wrong industry, or in the wrong racial or ethnic group. Once that mistake has been made, they could have been paragons of will and morality, but most of them would never even have had a chance to get out of the other America.

"The individual cannot usually break out of this vicious circle. Neither can the group, for it lacks the social energy and political strength to turn its misery into a cause. Only the larger society, with its help and resources, can really make it possible for those people to help themselves. Yet those who could make the difference too often refuse to act because of their ignorant, smug moralisms. They view the effects of poverty--above all, the warping of the will and spirit that is a consequence of being poor--as choices. Understanding the vicious circle is an important step in breaking down this prejudice.

"There is an even richer way of describing this same, general idea: Poverty in the United States is a culture, an institution, a way of life.

"There is a famous anecdote about Ernest Hemingway and F. Scott Fitzgerald. Fitzgerald is reported to have remarked to Hemingway, 'The rich are different.' And Hemingway replied, 'Yes, they have money.' Fitzgerald had much the better of the exchange. He understood that being rich was not a simple fact, like a large bank account, but a way of looking at reality, a series of attitudes, a special type of life. If this is true of the rich, it is ten times truer of the poor. Everything about them, from the condition of their teeth to the way in which they love, is suffused and permeated by the fact of their poverty. And this is sometimes a hard idea for a hemingway-like middle-class America to comprehend.

"...I work on an assumption that cannot be proved by Government figures or even documented by impressions of the other America. It is an ethical proposition, and it can be simply stated: In a nation with a technology that could provide every citizen with a decent life, it is an outrage and a scandal that there should be such social misery. Only if one begins with this assumption is it possible to pierce through the invisibility of 40,000,000 to 50,000,000 human beings and to see the other America. We must perceive passionately, if this blindness is to be lifted from us. A fact can be rationalized and explained away; an indignity cannot.

"What shall we tell the American poor, once we have seen them? Shall we say to them that they are better off than the Indian poor, the Italian poor, the Russian poor? That is one answer, but it is heartless. I should put it another way. I want to tell every well-fed and optimistic American that it is intolerable that so many millions should be maimed in body and in spirit when it is not necessary that they should be. My standard of comparison is not how much worse things used to be. It is how much better they could be if only we were stirred."